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Farmer Cooperative Statistics, 1999



Abstract

A survey of U.S. farmer cooperatives ending their business year during calendar year 1999 showed a net income of \$1.3 billion, down from \$1.7 billion in 1998. Gross and net business volumes were down for the 3,466 cooperatives in the survey. Assets, liabilities, and net worth were up. Business volume by commodity handled is reported for all cooperatives and by State. Number of cooperatives, cooperative memberships, and number of employees are classified according to marketing, farm supply, and service function. Trends in cooperative numbers, memberships, employees, business size, sales volume, net income, assets, liabilities, and net worth are reported along with data on selected activities of other cooperative service organizations.

Keywords: cooperatives, statistics, business volume, employees, memberships, balance sheet, net income.

FARMER COOPERATIVE STATISTICS, 1999

Charles A. Kraenzle, Ralph M. Richardson,
Celestine C. Adams, Katherine C. DeVille,
and Jacqueline E. Penn

U.S. Department of Agriculture,
Rural Development,
Rural Business-Cooperative Service,
STOP 3256
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Preface

Farmer cooperative statistics are collected annually to provide information on the progress and trends in cooperatives' growth and development. Many people use these statistics for research, technical assistance, education, planning, and public policy. Acquiring, analyzing, and disseminating farmer cooperative statistics is authorized by the Cooperative Marketing Act of 1926.

This report provides aggregate information on the number, membership, business volume, net income, and full-time employees of farmer cooperatives for calendar year 1999. Cooperatives are classified by principal product marketed and major function. Fishery cooperatives are included as miscellaneous marketing cooperatives. Both gross (includes inter-cooperative business) and net (excludes inter-cooperative business) dollar volumes are reported.

Statistics for 1999 are compiled on a national and State basis. State data are collected every other year and next will be published in 2001.

The information was collected from individual farmer and fishery cooperatives by a mail survey of all organizations identified by USDA's Rural Business-Cooperative Service (RBS) as a farmer or aquacultural cooperative. Information was requested for cooperatives' 1999 business year.

RBS conducts an annual census because of the need to make more accurate estimates for all cooperatives and to use current data on cooperatives for research, education, and technical assistance purposes. Information obtained from individual cooperatives is combined to maintain confidentiality.

Statistics for all cooperatives were derived by adding data estimated for nonrespondents to respondent data. Respondents to the 1999 survey accounted for 91 percent of the total gross sales of farmer cooperatives.

RBS depends on the cooperative community's response to its annual survey to develop a detailed and comprehensive set of statistics on farmer cooperatives. The time and effort taken to provide information and the timeliness with which it is furnished are greatly appreciated.

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Highlights

Both gross and net business volumes dropped and net income declined significantly according to the 1999 survey of marketing, farm supply, and related-service cooperatives by USDA's Rural Business-Cooperative Service (RBS). Although the number of cooperatives and memberships declined, total assets, total liabilities, and net worth increased. Number of full-time employees decreased. However, use of part-time and seasonal employees was up.

- Total gross business volume (includes inter-cooperative business) handled by cooperatives dropped 4.7 percent, from \$121 billion in 1998 to \$115.3 billion in 1999.
- Total net business (excludes inter-cooperative business) dropped 5.4 percent or \$5.6 billion from \$104.7 billion to \$99.1 billion.
- Total net income of \$1.3 billion was down 23.8 percent from the \$1.7 billion reported for 1998. The 1999 net included inter-cooperative dividends and refunds of \$383.5 million—down 33.1 percent from \$573 million.
- The number of cooperatives declined 5.1 percent, from 3,651 to 3,466.
- Grain and farm supply cooperatives operated an estimated 5,330 branches in 1999, down from 5,617 in 1998.
- Cooperative memberships were 3,173,323, down 5.3 percent from 3,352,577 in 1998.
- Cooperatives employed 172,951 full-time and 102,473 part-time and seasonal employees in 1999. Numbers of full-time employees decreased 0.5 percent, while part-time and seasonal employees increased 11.6 percent.
- Gross value of farm products marketed by cooperatives in 1999 decreased 4.8 percent, from \$84.5 billion to \$80.5 billion. Net value of these farm products, after eliminating duplication from inter-cooperative business, was \$72 billion, down 6.1 percent from \$76.6 billion.
- Gross value of farm supplies handled by farmer cooperatives was down 6.3 percent, from \$33 billion to \$30.9 billion. After adjusting for inter-cooperative business, the decrease was 5.6 percent, from \$24.6 billion to \$23.2 billion.
- Receipts for services related to marketing farm products and handling farm supplies, plus other income, increased 12.4 percent, from \$3.5 billion to \$3.9 billion.
- Combined assets for all farmer cooperatives increased 2.4 percent, from \$46.6 billion to \$47.7 billion. Net assets, after eliminating inter-cooperative investments, was up 1.1 percent, from \$41.9 billion to \$42.3 billion. This included investments in CoBank.
- Total liabilities of \$27.4 billion was up 3.1 percent from \$26.6 billion.
- Net worth, or member and patron equity, rose 1.6 percent to nearly \$20.3 billion from \$20 billion. Member and patron equity financed 42.5 percent of total assets, down from 42.9 percent in 1998.

Highlights

HIGHLIGHTS CAPSULE

	1998	1999	Change
Number of cooperatives	3,651	3,466	-185
Memberships	3,352,577	3,173,323	-179,254
Gross business volume (mil. dol.)	120,961	115,291	-5,670
Net business volume (mil. dol.)	104,667	99,064	-5,603
Net income (mil. dol.)	1,742	1,328	-414
Total assets (mil. dol.)	46,560	47,682	1,122
Net worth (mil. dol.)	19,954	20,263	309
Full-time employees	173,791	172,951	-840
Part-time and seasonal employees	91,799	102,473	10,674
Leading States	1997	1999	
	Minnesota	Minnesota	
Number of cooperatives	368	305	-63
	Minnesota	Kentucky	
Memberships	296,058	231,862	N/A
	Iowa	Minnesota	
Net business volume (mil. dol.)	10,941	9,306	N/A

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Rural Business-Cooperative Service

I—Definition of a Farmer Cooperative

The Rural Business-Cooperative Service (RBS) in USDA's Rural Development mission area considers four major criteria in identifying an organization as a farmer cooperative: (1) membership is limited to persons producing agricultural and aquacultural products and to associations of such producers; (2) cooperative members are limited to one vote regardless of the amount of stock or membership capital owned, or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year, or the legal rate in the State, whichever is higher; (3) business conducted with nonmembers may not exceed the value of business done with members; and (4) the cooperative operates for the mutual interest of members by providing member benefits on the basis of patronage.

These criteria may create larger or smaller numbers of farmer cooperatives than found in lists or directories of State agencies or cooperative councils. RBS includes only marketing, farm supply, and related-service cooperatives on its list. Fishery cooperatives are included with miscellaneous marketing cooperatives. Wool pools are included as marketing cooperatives. Livestock shipping associations and rice drying cooperatives, beginning with 1992 and 1993, respectively, are considered service cooperatives.

Many State lists include other types, such as production, credit, telephone, electric, and consumer cooperatives, as well as those that do not meet the RBS definition. Other reasons for possible differences in the number of cooperatives are that: (1) RBS may not learn of certain cooperatives operating in a State for a considerable period of time; (2) a cooperative may not

have completed and returned an initial questionnaire; or (3) no notice is received that a cooperative discontinued operating.

Year-to-year comparisons with specific commodity groups, therefore, should reflect any differences in lists and classifications in State and Federal data.

Classification of Cooperatives

Statistics are presented according to a cooperative's major function or classification--marketing, farm supply, and related-service.

Marketing cooperatives derive most of their total dollar volume from the sale of members' farm products. RBS classifies these cooperatives into one of 13 commodities or commodity groups depending upon which accounts for most of its business volume. RBS may reclassify a cooperative into a different commodity category if its primary business volume changes significantly.

Farm supply cooperatives derive most of their business volume from the sale of farm production supplies. These cooperatives handle a wide variety of supplies, farm machinery and equipment, and building materials. Many also handle farm and home items, such as heating oil, lawn and garden supplies and equipment, and food.

Service cooperatives provide specialized services related to the agricultural business operations of farmers, ranchers, or cooperatives, such as cotton ginning, trucking, storing, drying, and artificial insemination. Livestock shipping associations and rice drying cooperatives were reclassified from marketing to service in 1992 and 1993, respectively.

Many cooperatives handle multiple commodities and provide both marketing and farm supply services, as well as the facilities and equipment used to perform

these services. These associations are classified according to the predominant commodity or function, as indicated by their business volume.

Information on other types of service cooperatives, such as Farm Credit System institutions, rural credit unions, rural electric cooperatives, and dairy herd improvement associations, is presented separately.

Organizational Membership Structures

Centralized

Of the 3,466 farmer cooperatives in 1999, 3,379 were centralized organizations, mostly locals with individual farmer-members. Centralized cooperatives usually serve a local area or community, county, or several counties. Most usually perform a limited number of initial marketing functions. Most farm supply sales are at the retail level. A few centralized cooperatives, principally regionals, operate over large geographic areas and have members in several States. They often provide more vertically integrated services, such as processing farm products or manufacturing feed and fertilizer.

Bargaining associations also have a centralized organizational structure. They derive all or most of their business volume from negotiating with distributors, processors, and other buyers and sellers over price, quantity, grade, terms of sale, and other factors involved in marketing farm products. Only a few bargain to purchase farm supplies. While the primary function of such an association is to bring buyers and sellers together to contract for the sale of members' products, many bargaining associations now perform additional functions.

For example, dairy bargaining associations at one time only negotiated price. Now, many perform additional functions, such as physically handling part of the milk for spot sales. They, like other dairy marketing cooperatives, represent their members at Federal or State milk marketing order hearings.

Federated

Federated cooperatives comprise two or more member associations organized to market farm products, purchase production supplies, or perform bargaining functions.

The 63 federated associations often operate at points quite distant from their headquarters. Federated cooperative members are usually local cooperatives, although some are interregional associations with regional cooperative members.

Mixed

A few cooperatives have both individual farmer-members and autonomous cooperative members, a combination of centralized and federated structures. They serve large geographic areas, with members in many States, and provide a variety of integrated services. RBS has identified 24 such cooperatives.

II—1999 STATISTICS

Cooperatives' net business volume was \$99.1 billion in 1999, down from \$104.7 billion in 1998; the second year in a row that business volume dropped. Net income of \$1.3 billion was down from \$1.7 billion in 1998, a drop of 23.8 percent. Net income, like business volume, also dropped for the second year. Numbers of cooperatives and memberships, at 3,466 and 3,173,323, respectively, were down. Combined assets, net worth and liabilities were all up.

Table 1—Number of cooperatives and memberships, by major business activity, 1999

Major business activity	Cooperatives	Memberships
	<i>Number</i>	
Beans and peas, dry edible	8	2,796
Cotton	15	43,754
Dairy	221	90,675
Fruits and vegetables	231	40,876
Grains and oilseeds ¹	896	657,921
Livestock	81	137,054
Nuts	18	43,749
Poultry ²	15	29,190
Rice	17	11,799
Sugar ³	48	15,703
Tobacco	25	170,026
Wool and mohair	84	15,440
Miscellaneous	90	23,856
Total marketing	1,749	1,282,839
Farm supply	1,313	1,731,377
Service	404	159,107
Total	3,466	3,173,323

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Includes eggs, turkeys, ratite, squab, and related products.

³ Includes beets, sugarcane, honey, and related products.

Number of Cooperatives

The 1999 survey accounted for 3,466 marketing, farm supply, and related-service¹ cooperatives, compared with 3,651 in 1998. The net decrease of 185 associations (5.1 percent) largely reflects a continuing trend involving dissolution, merger, or acquisition. The largest decrease was in grain and oilseed (grain) cooperatives (68), followed by related-service (37) and farm supply (34) cooperatives.

Of the 3,466 cooperatives, 1,749 primarily marketed farm products, 1,313 primarily handled farm production supplies, and 404 provided services related to marketing or purchasing activities (table 1).

Marketing cooperatives decreased slightly, from 51 percent in 1998 to 50.5 percent of the total number of cooperatives in 1999, while farm supply cooperatives increased slightly, from 36.9 to 37.9 percent. Related-service cooperatives decreased slightly, from 12.1 to 11.7 percent.

¹ Services include trucking, cotton ginning, storage, crop drying, artificial insemination, livestock shipping, and similar services affecting the form, quality, or location of farm products and supplies. They do not include credit, electric, telephone, or other such services not directly related to marketing or purchasing activities.

These percentage changes to some extent reflect reclassification because of annual dollar volume changes. In any given year, sales of farm supplies or grains and oilseeds can be higher due to market supply and demand conditions.

Cooperative numbers by marketing and farm supply and service functions by State are shown in table 2. North Dakota is the leading State in marketing cooperatives (151), followed closely by Minnesota (143). Texas accounted for the largest number of farm supply and service cooperatives.

The 10 leading States in terms of number of cooperatives are shown in figure 1, which also shows the number of cooperatives by function in each State. For example, Minnesota had about an equal number of marketing and farm supply cooperatives, while the majority in Texas were service cooperatives, mainly cotton gins. South Dakota, the ninth leading State, had the largest percentage of farm supply cooperatives.

Grain and Farm Supply Branches

Many cooperatives operate branch facilities to better serve their members. Most are owned. Some are leased. A number of formerly independent cooperatives are serving a local community. For economic or other reasons, many were acquired by or merged with other cooperatives and operated as branches from which to serve members and patrons at outlying locations.

Figure 1— Number of Cooperatives by Function, Leading States, 1999

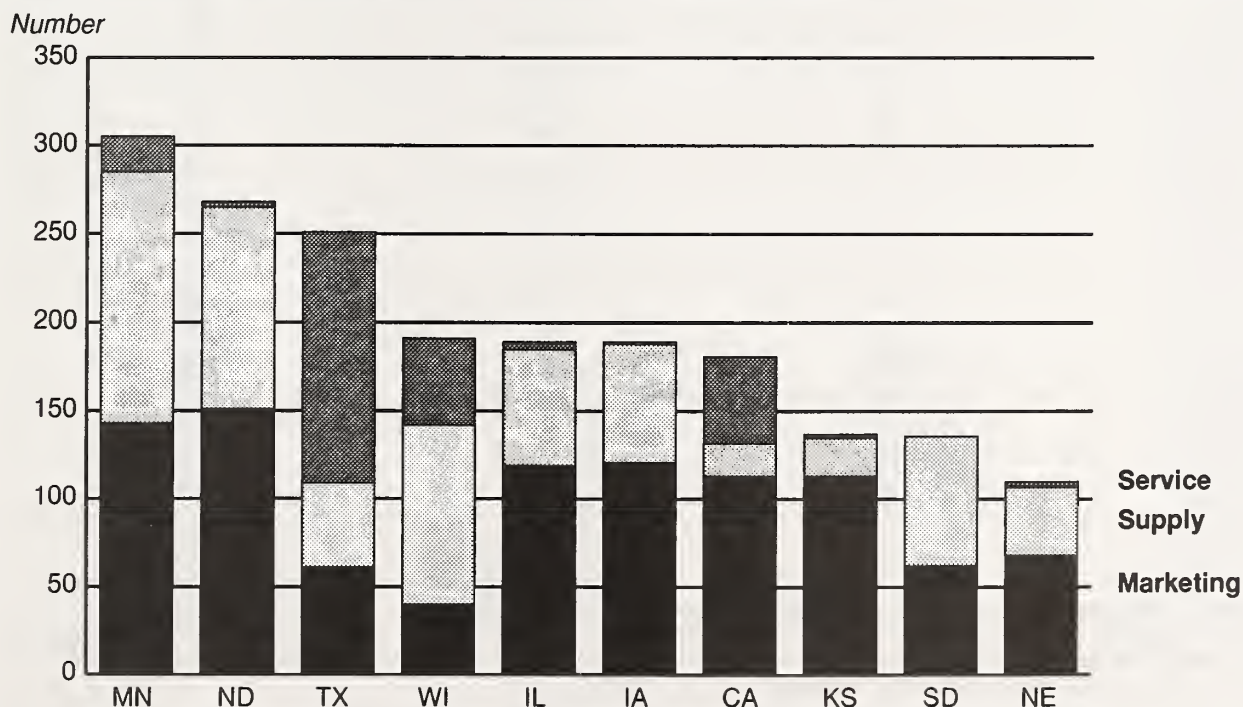


Table 2—Number of cooperatives¹, by major function and State, 1999 ²

State	Major function		Total
	Marketing	Farm Supply and Service	
	<i>Number</i>		
Alabama	10	53	63
Arizona	5	4	9
Arkansas	11	42	53
California	113	68	181
Colorado	27	20	47
Florida	32	7	39
Georgia	8	8	16
Hawaii	21	7	28
Idaho	25	15	40
Illinois	119	70	189
Indiana	23	32	55
Iowa	121	68	189
Kansas	113	24	137
Kentucky	12	29	41
Louisiana	17	31	48
Maryland	4	17	21
Massachusetts	8	5	13
Michigan	34	28	62
Minnesota	143	162	305
Mississippi	18	58	76
Missouri	25	46	71
Montana	38	35	73
Nebraska	68	42	110
New Jersey	13	5	18
New Mexico	5	5	10
New York	82	16	98
North Carolina	19	7	26
North Dakota	151	117	268
Ohio	59	24	83
Oklahoma	45	49	94
Oregon	20	15	35
Pennsylvania	42	14	56
South Dakota	62	74	136
Tennessee	8	71	79
Texas	61	190	251
Utah	10	7	17
Virginia	21	38	59
Washington	50	34	84
West Virginia	14	13	27
Wisconsin	40	151	191
Wyoming	7	6	13
Other States ³	45	10	55
United States	1,749	1,717	3,466

¹ Centralized and federated cooperatives and those with mixed organizational structures.

² Data covering operations of cooperatives whose fiscal years ended in 1999.

³ Includes States with fewer than three cooperatives for any function. States with at least three cooperatives were: Alaska, 9; Connecticut, 4; Delaware, 3; Maine 24; South Carolina, 6; and Vermont, 5.

In 1999, grain and farm supply cooperatives operated an estimated 5,330 branches--2,163 and 3,167, respectively. There was a decrease of 136 branches for grain cooperatives and a decrease of 151 branches for farm supply cooperatives. Both grain and farm supply cooperatives averaged 2.4 branches per cooperative in 1999. In 1998, grain and farm supply cooperatives operated an estimated 5,617 branches.

Figure 2 shows that several of the largest cooperatives (mainly regional) had more branches than many smaller (local) cooperatives combined. The 51 largest grain cooperatives--5.7 percent of all grain cooperatives--accounted for 35.2 percent of the total number of branches operated by grain cooperatives. And the 94 largest farm supply cooperatives--7.2 percent of all farm supply cooperatives--had 1,663 branches, 52.5 percent of all farm supply branches.

Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled an estimated 3,173,323 in 1999, down 5.3 percent from 3,352,577 in 1998 (table 3).

By the cooperative's major business activity, 54.5 percent were memberships of farm supply cooperatives (figure 3) and 20.7 percent were of grain. Dairy

cooperative memberships were only 2.9 percent of cooperatives' total memberships, but accounted for 26.2 percent of cooperatives' net business volume in 1999, up from 24.2 percent in 1998.

Among marketing cooperatives, memberships decreased in 1999 for every type except cotton.

The largest proportions of memberships in farm supply cooperatives were among the smallest and largest cooperatives (figure 4). Memberships in marketing cooperatives were the greatest proportion of total memberships among those cooperatives with gross business volumes of \$15 million to \$100 million.

Employees

Farmer cooperatives, like other businesses, employ full-time and, in most cases, part-time and seasonal employees to run their operations. The number and type of employees hired depends on a number of factors, such as size of operation, type of commodity handled, and involvement in value-added activities.

In 1999, farmer cooperatives employed an estimated 275,424 full-time, part-time and seasonal employees, up from 265,590 in 1998 (table 4) due to increased use of part-time employees. By type, marketing cooperatives had 192,920 employees (70 percent of

Figure 2— Branches of Grain and Farm Supply Cooperatives, by Size, 1999

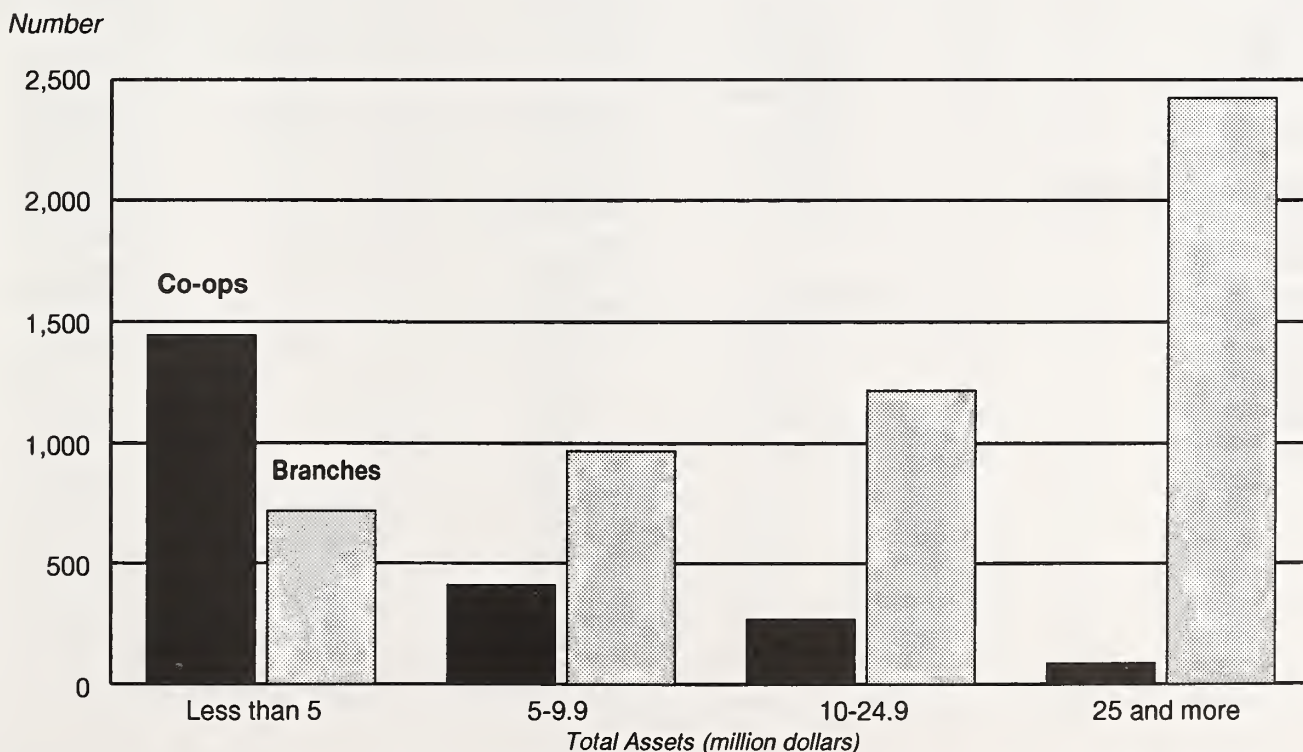


Table 3— Number of co-ops¹ and memberships², by major business activity and State, 1999³

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
BEANS AND PEAS, DRY EDIBLE			FRUITS AND VEGETABLES (Continued)		
California	3	666	Massachusetts	3	312
North Dakota	3	1,000	Michigan	14	3,379
Other States	<u>2</u>	<u>1,130</u>	Minnesota	3	221
United States	8	2,796	New Jersey	9	713
			New York	9	975
COTTON⁴			North Carolina	4	72
California	3	1,537	North Dakota	3	214
Mississippi	3	2,786	Ohio	5	457
Texas	4	24,081	Oregon	11	1,101
Other States	5	15,152	Pennsylvania	6	555
Foreign ⁵	<u>—</u>	<u>198</u>	Texas	3	247
United States	15	43,754	Washington	19	5,367
			Other States	20	2,572
			Foreign ⁵	<u>—</u>	<u>91</u>
DAIRY			United States	231	40,876
California	8	1,215			
Illinois	4	2,609	GRAINS AND OILSEEDS, EXCLUDING COTTONSEED⁶		
Iowa	8	4,717	California	3	231
Massachusetts	3	243	Colorado	15	9,091
Minnesota	35	17,097	Idaho	5	1,141
New Mexico	5	316	Illinois	110	94,841
New York	67	6,433	Indiana	19	29,224
North Dakota	5	1,108	Iowa	106	87,897
Ohio	5	845	Kansas	113	113,038
Oregon	3	794	Michigan	6	2,758
Pennsylvania	19	2,612	Minnesota	94	52,651
Texas	4	1,913	Mississippi	5	2,711
Virginia	4	1,187	Missouri	17	22,637
Wisconsin	30	25,266	Montana	12	3,121
Other States	<u>21</u>	<u>24,320</u>	Nebraska	60	61,592
United States	221	90,675	North Dakota	119	45,786
			Ohio	41	28,899
FRUITS AND VEGETABLES			Oklahoma	41	30,821
Arizona	4	752	South Dakota	60	36,813
Arkansas	3	98	Texas	37	17,577
California	67	18,652	Washington	21	11,568
Colorado	9	471	Other States	<u>12</u>	<u>5,524</u>
Florida	23	1,738	United States	896	657,921
Hawaii	7	343			
Idaho	4	2,002			
Maine	5	544			

Continued

Table 3— Number of co-ops¹, and memberships², by major business activity and State, 1999³ (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
LIVESTOCK			TOBACCO⁷		
Alabama	6	5,240	Kentucky	5	76,989
Hawaii	4	81	North Carolina	7	24,852
Idaho	3	4,355	Tennessee	7	67,112
Illinois	3	19,122	Virginia	3	739
Indiana	3	2,081	Other States	3	334
Kentucky	4	868			
Mississippi	4	4,225	United States	25	170,026
Missouri	6	5,366			
North Dakota	8	567	WOOL AND MOHAIR		
Ohio	4	7,425	Idaho	4	159
Virginia	4	810	Montana	19	861
West Virginia	3	426	North Dakota	4	412
Wisconsin	5	60,617	Ohio	3	1,518
Other States	24	25,871	Pennsylvania	14	1,901
			Utah	3	125
United States	81	137,054	Virginia	8	590
			West Virginia	10	899
NUT			Wyoming	3	183
California	7	6,764	Other States	16	8,710
Other States	11	36,985	Foreign ⁵	—	82
United States	18	43,749	United States	84	15,440
POULTRY⁸			MISCELLANEOUS¹⁰		
California	3	82	Alaska	9	1,603
Utah	3	65	California	10	1,383
Other States	9	28,954	Florida	6	325
Foreign ⁵	—	89	Georgia	3	80
			Hawaii	6	562
United States	15	29,190	Maine	15	924
			Minnesota	5	11,069
RICE			Mississippi	3	186
California	5	1,789	North Dakota	6	2,322
Louisiana	3	186	Washington	5	707
Texas	6	918	Other States	22	4,695
Other States	3	8,905			
Foreign ⁵	—	1	United States	90	23,856
United States	17	11,799	TOTAL MARKETING		
			Alabama	10	14,498
SUGAR⁹			Alaska	9	1,815
Idaho	7	2,051	Arizona	5	2,191
Louisiana	9	583	Arkansas	11	12,460
Michigan	7	2,117	California	113	34,903
Minnesota	3	2,467	Colorado	27	12,936
Montana	3	517	Florida	32	5,696
Wyoming	4	455	Georgia	8	23,931
Other States	15	7,511	Hawaii	21	1,300
Foreign ⁵	—	2	Idaho	25	10,249
			Illinois	119	116,926
United States	48	15,703	Indiana	23	32,774
			Iowa	121	99,245

Continued

Table 3— Number of co-ops¹ and memberships², by major business activity and State, 1999³ (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
TOTAL MARKETING (Continued)			FARM SUPPLY (Continued)		
Kansas	113	116,201	Kentucky	28	147,137
Kentucky	12	80,984	Louisiana	19	6,529
Louisiana	17	3,946	Maryland	15	70,647
Maine	22	1,878	Massachusetts	5	4,371
Maryland	4	789	Michigan	23	11,344
Massachusetts	8	846	Minnesota	142	96,651
Michigan	34	13,636	Mississippi	37	86,153
Minnesota	143	85,225	Missouri	45	109,267
Mississippi	18	11,782	Montana	35	23,704
Missouri	25	32,734	Nebraska	39	26,848
Montana	38	5,016	New Jersey	3	4,636
Nebraska	68	65,505	New York	11	1,805
New Jersey	13	2,647	North Dakota	114	57,853
New Mexico	5	1,259	Ohio	20	13,225
New York	82	9,630	Oklahoma	28	18,633
North Carolina	19	27,635	Oregon	14	19,288
North Dakota	151	55,582	Pennsylvania	7	28,262
Ohio	59	39,183	South Dakota	74	60,713
Oklahoma	45	41,832	Tennessee	70	68,265
Oregon	20	5,348	Texas	48	33,106
Pennsylvania	42	5,167	Utah	6	5,642
South Carolina	4	3,040	Virginia	35	142,171
South Dakota	62	41,333	Washington	30	11,919
Tennessee	8	69,266	West Virginia	13	73,498
Texas	61	50,694	Wisconsin	102	97,009
Utah	10	2,759	Wyoming	6	4,129
Vermont	5	1,614	Other States	12	155,185
Virginia	21	26,517	Foreign ⁵	—	4,326
Washington	50	19,262	United States	1,313	1,731,377
West Virginia	14	1,530			
Wisconsin	40	87,382			
Wyoming	7	1,016			
Other States	5	2,214			
Foreign ⁵	—	463			
United States	1,749	1,282,839			
FARM SUPPLY			SERVICE¹¹		
Alabama	48	39,208	Alabama	5	180
Arkansas	36	42,468	Arizona	4	855
California	19	14,686	Arkansas	6	1,110
Colorado	19	19,677	California	49	4,015
Florida	6	8,823	Georgia	3	365
Georgia	5	2,377	Hawaii	5	107
Idaho	14	8,334	Illinois	4	255
Illinois	66	78,077	Louisiana	12	1,819
Indiana	30	42,532	Michigan	5	4,808
Iowa	67	75,918	Minnesota	20	5,026
Kansas	22	16,961	Mississippi	21	7,304
			New Mexico	4	1,504
			New York	5	6,335
			North Carolina	5	108
			North Dakota	3	5,000
			Ohio	4	3,562
			Oklahoma	21	8,146

Continued

Table 3— Number of co-ops¹ and memberships², by major business activity and State, 1999³

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
SERVICE¹¹ (Continued)			TOTAL (Continued)		
Pennsylvania	7	11,579	Ohio	83	55,970
Texas	142	34,264	Oklahoma	94	68,611
Virginia	3	5,620	Oregon	35	24,638
Washington	4	2,722	Pennsylvania	56	45,008
Wisconsin	49	21,299	South Carolina	6	3,458
Other States	23	33,124	South Dakota	136	107,046
United States	404	159,107	Tennessee	79	139,124
			Texas	251	118,064
TOTAL			Utah	17	10,013
Alabama	63	53,886	Vermont	5	5,981
Alaska	9	1,815	Virginia	59	174,308
Arizona	9	3,376	Washington	84	33,903
Arkansas	53	56,038	West Virginia	27	75,083
California	181	53,604	Wisconsin	191	205,690
Colorado	47	32,613	Wyoming	13	5,145
Connecticut	4	2,728	Other States	4	30,121
Delaware	3	43,422	Foreign ⁵	—	4,789
Florida	39	26,050	United States	3,466	3,173,323
Georgia	16	26,673			
Hawaii	28	2,768			
Idaho	40	18,583			
Illinois	189	195,258			
Indiana	55	75,409			
Iowa	189	180,168			
Kansas	137	133,269			
Kentucky	41	231,862			
Louisiana	48	12,294			
Maine	24	8,348			
Maryland	21	71,953			
Massachusetts	13	5,551			
Michigan	62	29,788			
Minnesota	305	186,902			
Mississippi	76	105,239			
Missouri	71	142,771			
Montana	73	28,720			
Nebraska	110	92,353			
New Jersey	18	7,347			
New Mexico	10	2,974			
New York	98	17,770			
North Carolina	26	98,404			
North Dakota	268	118,435			

¹ Includes centralized and federated cooperatives and those with mixed organizational structures.

² Includes farmer-members (entitled to vote for directors), but not nonvoting patrons. (Duplication in these membership figures occurs because many farmers belong to more than one cooperative.) Totals may not add due to rounding.

³ Data covering operations of cooperatives for fiscal years that ended in 1999. States listed are those with more than two cooperatives or where disclosure is not a problem.

⁴ Cotton ginning cooperatives are included as service cooperatives.

⁵ Includes memberships located in other countries.

⁶ Excludes soybean meal and oil.

⁷ Membership fluctuates annually and is affected by the extent to which producers participate in price stabilization programs.

⁸ Includes eggs, turkeys, ratite, squab, and related products.

⁹ Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.

¹⁰ Includes forest products, hay, hops, nursery stock, coffee, and other farm products not separately classified.

¹¹ Cooperatives providing services such as cotton ginning, livestock shipping, storing, grinding, drying, and artificial insemination.

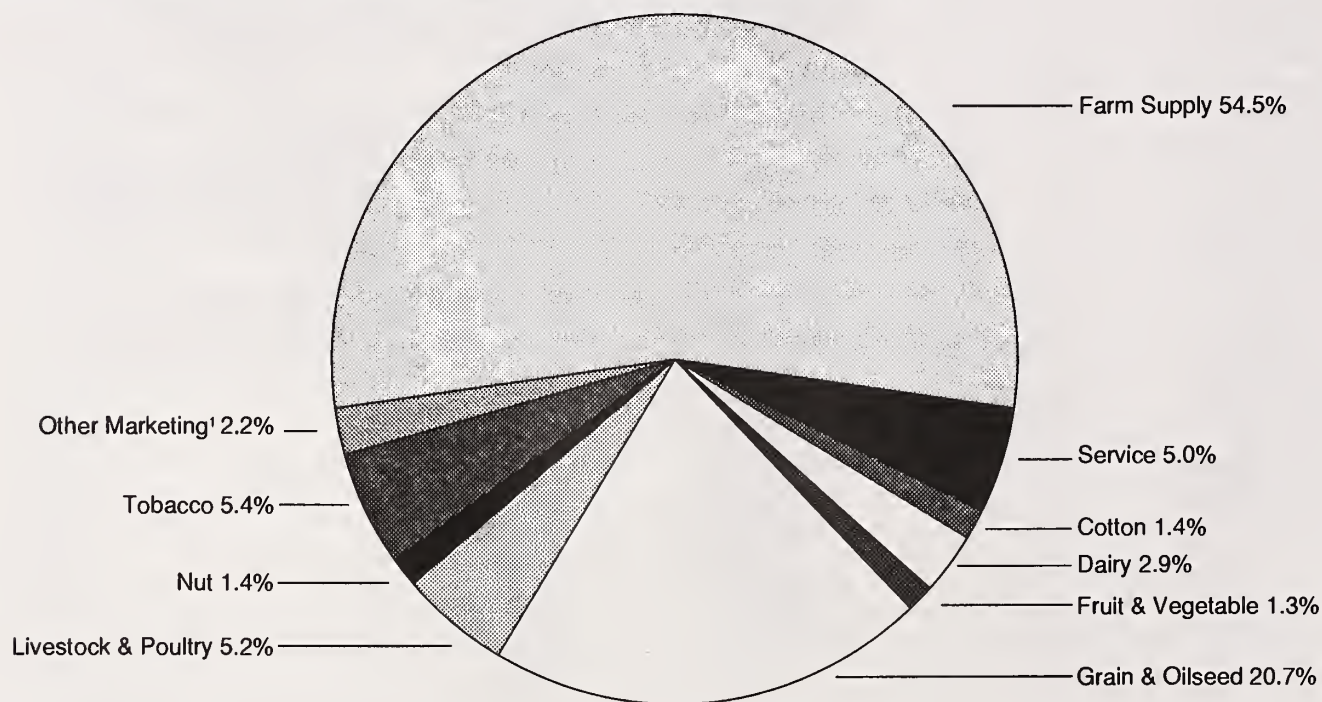
Table 4— Full-time and part-time and seasonal employees of farmer cooperatives, by type of co-op, 1998-99

Principal product(s) marketed or major function	Full-time employees		Part-time and seasonal ¹	
	1998	1999	1998	1999
<i>Number</i>				
Products marketed:				
Cotton	1,844	1,787	1,050	1,409
Dairy	27,056	24,598	925	1,875
Fruits & vegetables	23,734	23,329	34,321	48,004
Grains and oilseeds, excluding cottonseed	23,873	20,998	8,538	7,916
Livestock and poultry	28,031	32,690	13,776	2,666
Rice	2,655	2,600	231	1,443
Sugar	4,402	4,459	4,052	4,431
Other products ²	8,474	8,525	2,173	6,190
Marketing	120,069	118,986	65,066	73,934
Farm supply	48,171	49,466	18,335	20,774
Service	5,551	4,499	8,398	7,765
Total	173,791	172,951	91,799	102,473

¹ Number of part-time and seasonal employees was estimated for all cooperatives based on the relationship of part-time and seasonal to full-time employees for the respondent cooperatives. Totals may not add due to rounding.

² Includes dry edible beans and peas, nuts, tobacco, wool, fishery, and miscellaneous marketing cooperatives.

Figure 3— Distribution of Memberships, by Type of Cooperative, 1999



Percent based on 3,173,323 total memberships.

¹ Includes dry bean and pea, wool and mohair, rice, sugar, fishery, and other miscellaneous marketing cooperatives.

Figure 4— **Cooperative Memberships Grouped by Function and Gross Business Volume, 1999**
1,000 Memberships

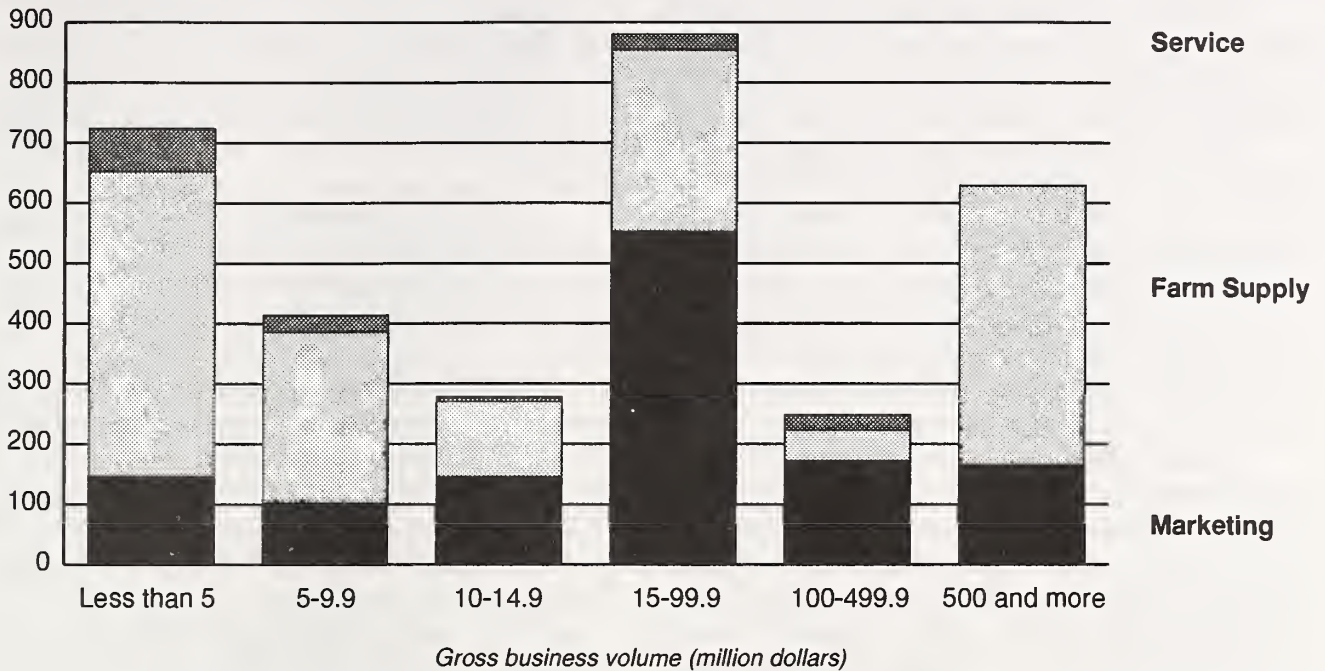
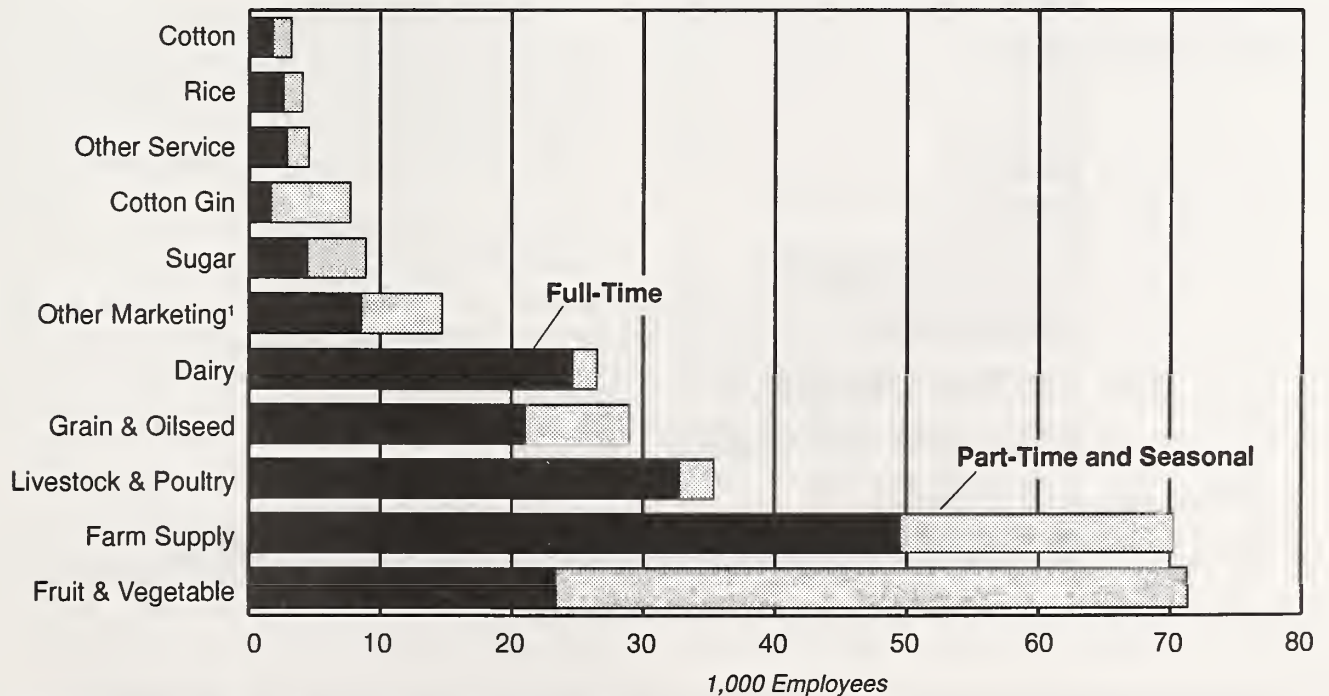


Figure 5— **Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1999**



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

total); farm supply cooperatives had 70,240 employees (25.5 percent); and related-service cooperatives had 12,264 employees (4.5 percent).

Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (71,333), followed by livestock and poultry (35,356) and grain and oilseed (28,914).

Figure 5 shows the number of full-time and part-time and seasonal employees by type of cooperative for 1999. Fruit and vegetable and farm supply cooperatives used the most employees and cotton cooperatives the fewest. Dairy cooperatives had the smallest proportion of total part-time and seasonal employees. Fruit and vegetable cooperatives, followed by cotton gin and sugar cooperatives, had the largest proportion of part-time and seasonal employees.

Full-time employees totaled 172,951 in 1999, down from 173,791 in 1998, or 0.5 percent. The number per association, however, was nearly 50, up from 48 in 1998, due to fewer cooperatives. The 1,749 marketing cooperatives employed 118,986 persons, down 0.9 percent from 1998. Livestock and poultry cooperatives, with 32,690, had the most full-time employees, while

dairy cooperatives, with 24,598, ranked second. Together, they accounted for 48.1 percent of the full-time employees of marketing cooperatives.

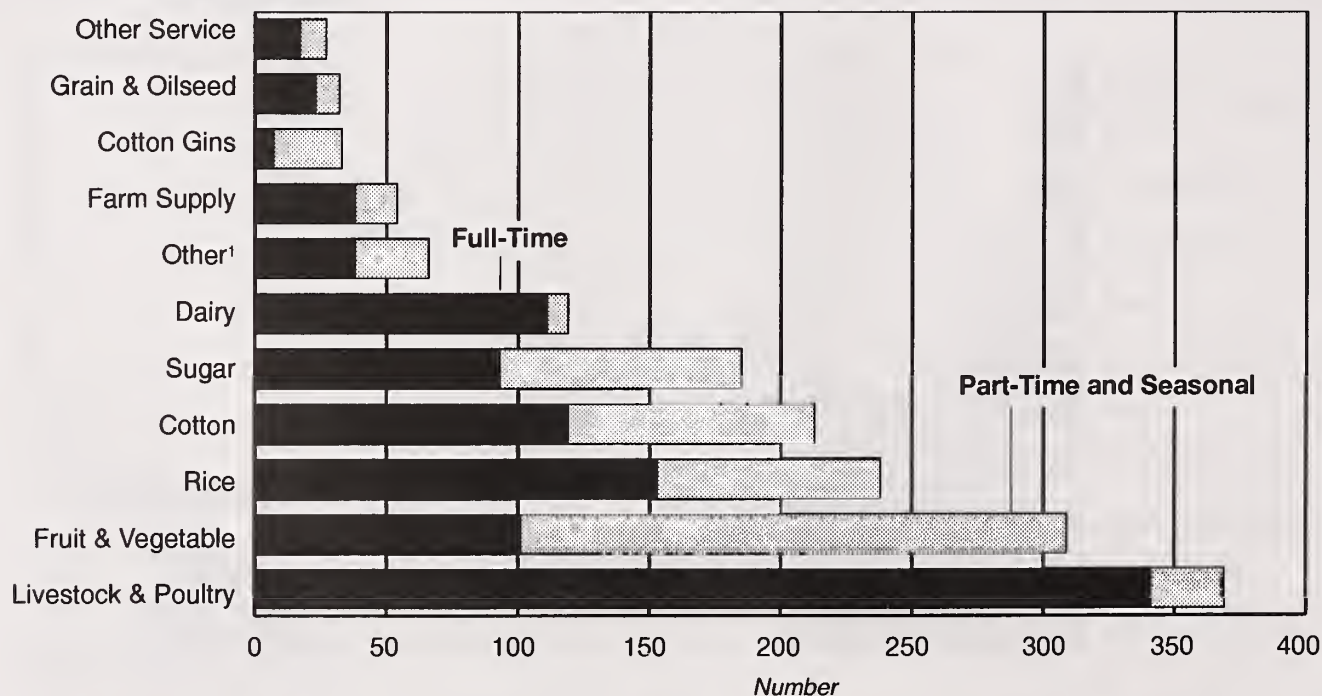
The 1,313 farm supply cooperatives hired 49,466 full-time employees, up 2.7 percent from 48,171 reported by 1,347 farm supply cooperatives for 1998. Full-time employees of the 404 related-service cooperatives totaled 4,499 in 1999, down from 5,551, or nearly 19 percent.

Cooperatives used 102,473 part-time and seasonal employees in 1999, up 10,674, or 11.6 percent, from 1998. Both marketing and farm supply cooperatives increased their use of part-time and seasonal employees.

In 1999, marketing cooperatives reported 73,934 part-time and seasonal employees, or 72.1 percent of the total. Number per cooperative averaged more than 42. Fruit and vegetable and grain cooperatives, with 55,920, accounted for 75.6 percent. Farm supply cooperatives had 20,774 part-time and seasonal employees, an average of 16.

Most types of marketing cooperatives operated with more employees than did farm supply cooperatives. For example, livestock and poultry cooperatives averaged more than 368 employees (figure 6).

Figure 6— **Average Number of Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1999**



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

Total Labor Expense

One of the largest expense items of any business is wages and benefits. Cooperatives are no exception. Hiring employees full-time or part-time and seasonally involves decisions on the number of employees and levels of salaries and wages. Other employee-related expenses include associated payroll taxes, health and life insurance, etc.

The average total labor expense per cooperative for those reporting in both 1998 and 1999 is shown in table 5. Average total labor expense (including director fees) is shown by type of cooperative and, in some cases, by asset group. This information can be used for comparing the average total labor expense of individual cooperatives of similar type and size. For those where no size grouping is shown, labor expense may not be a good barometer because of the mix of sizes included in the group.

Overall, total labor expense for the cooperatives reporting total wages and benefits both years was up 3.1 percent. Average total labor expense varied from 1998 to 1999 (table 5). The change ranged from a 15.6-percent decrease for rice cooperatives to an increase of 30.5 percent for miscellaneous marketing cooperatives. As expected, average total labor expense increased as size of cooperative increased, especially for dairy, fruit and vegetable and cotton gins. Average total labor expense for cooperatives involved in processing or manufacturing activities would be expected to be high.

Total Sales Per Dollar of Labor Expense

Labor productivity can be measured by examining the relationship between total sales and total labor expense. Table 6 shows total sales per dollar of total labor expense by type and size of cooperative, where applicable.

Total sales per dollar of total labor expense is relatively high for cooperatives involved in bargaining (dairy) or operating auctions (tobacco and livestock). In these situations, total labor requirements are low and sales are high. Surveyed cooperatives reported on the value of the product for which they bargained or which they auctioned off.

Dairy cooperatives with assets of \$500,000 to \$1 million accounted for the highest sales per dollar of labor expense, \$166.20 (table 6). Other service cooperatives with assets in the same range had the lowest sales per dollar of labor expense, \$2.48.

Total sales per dollar of labor expense varied less as cooperative size increased for grain and oilseed and farm supply cooperatives than it did for dairy and fruit and vegetable cooperatives. Dairy cooperatives

ranged from \$23.53 to \$166.20; fruit and vegetable cooperatives from \$7.77 to \$49.20; grain and oilseed cooperatives from \$19.25 to \$30.24; and farm supply cooperatives ranged from \$8.54 to \$12.04.

Cooperative leaders may want to calculate their total sales per dollar of total labor expense and compare it with the appropriate figure in table 6 to see how well their cooperative is performing.

Business Size

Most farmer cooperatives, as measured by annual gross business volume, are relatively small and serve local areas. Several are actively seeking regional, national, and even international markets to increase business volume. These larger cooperatives account for much of cooperatives' business volume.

The increased size comes, in large part, from mergers, consolidations, and acquisitions. Data used were not adjusted for changes in price levels, and some size changes resulted from inflation.

In 1999, 77.4 percent of all farmer cooperatives reported a business volume of less than \$15 million. However, they accounted for only 10.2 percent of the total gross dollar volume, up slightly from 9.9 percent in 1998 (table 7 and figure 7). Only 2.2 percent of farmer cooperatives reported a business volume of at least \$200 million, but they accounted for 64.7 percent of the total sales, up from 63.1 percent in 1998. Cooperatives with a business volume in the range of \$15 million to \$200 million in 1999 accounted for a smaller share of all cooperatives' total gross dollar volume. In 1999, they accounted for 25.1 percent compared with 27.2 percent in 1998.

Business Volume

Total gross business volume of the 3,466 marketing, farm supply, and related-service cooperatives for 1999 was \$115.3 billion (table 8), down 4.7 percent from \$121 billion in 1998. Cooperatives' gross business volume peaked at \$128.1 billion in 1996.

Total net business volume of farmer cooperatives in 1999 was \$99.1 billion -- \$72 billion from farm products marketed, \$23.2 billion from farm supply sales, and \$3.9 billion from services performed and from other income sources. The total net figure, excluding inter-cooperative business, was down from \$104.7 billion in 1998. Cooperatives' net business volume reached a high of \$106.7 billion in 1997. However, adjusting for price change, net business volume actual-

Table 5—Average total labor expense for cooperatives reporting, by selected type and size, 1998-99

Type of co-op and asset group (Mil. Dol.)	Average total labor expense ¹		Change
	1998	1999	
	\$1,000		Percent
Dry bean and pea	2,274.1	2,392.5	5.2
Cotton	5,469.9	4,783.2	-12.6
Dairy	3,594.4	3,809.5	6.0
Less than 0.5	28.7	29.4	2.2
0.5 - .99	117.8	117.1	-0.6
1.0 - 2.49	180.6	186.0	3.0
2.5 - 24.99	1,087.1	1,163.5	7.0
25.0 and more	18,898.6	20,021.9	5.9
Fruit and vegetable	5,177.0	5,390.3	4.1
Less than 0.5	94.1	100.4	6.7
0.5 - .99	279.5	272.9	-2.4
1.0 - 2.49	783.7	873.0	11.4
2.5 - 24.99	2,207.3	2,077.8	-5.9
25.0 and more	18,509.1	19,541.6	5.6
Fruit and vegetable	5,177.0	5,390.3	4.1
Fresh only	1,866.5	1,899.4	1.8
Processed only	23,840.7	25,108.2	5.3
Fresh and processed	6,375.8	6,617.8	3.8
Grain and oilseed	872.0	897.1	2.9
Less than 0.5	114.4	115.0	0.5
1.0 - 2.49	218.6	227.2	3.9
2.5 - 24.99	899.2	936.1	4.1
25.0 and more	4,571.9	4,529.6	-0.9
Livestock	1,124.0	1,197.2	6.5
Nut	12,873.6	14,495.3	12.6
Poultry	85,246.7	99,479.5	16.7
Rice	6,416.3	5,412.5	-15.6
Sugar	28,697.8	30,336.9	5.7
Tobacco	159.4	164.3	3.1
Fishery	2,516.1	2,533.2	0.7
Miscellaneous marketing	886.7	1,157.2	30.5
Farm supply	1,569.2	1,628.5	3.8
Less than 0.5	77.5	76.3	-1.6
0.5 - .99	176.9	181.2	2.4
1.0 - 2.49	336.0	344.5	2.6
2.5 - 24.99	1,333.5	1,376.0	3.2
25.0 and more	24,615.2	25,763.5	4.7
Cotton gin	429.1	420.1	-2.1
Less than 0.5	126.2	110.8	-12.2
0.5 - .99	204.4	182.5	-10.7
1.0 - 2.49	348.0	337.5	-3.0
2.5 and more	815.2	819.5	0.5
Service	1,697.6	1,708.9	0.7
Less than 2.5	616.6	686.1	11.3
2.5 and more	1,494.3	1,520.2	1.7

¹ Includes wages and salaries, payroll taxes, employee benefits, and director fees.

Table 6— Total sales per dollar of total labor expense for cooperatives reporting, by selected type and size, 1999

Type of co-op and asset group	Sales per \$1 labor expense ¹	Type of co-op and asset group	Sales per \$1 labor expense ¹
<i>Million Dollars</i>	<i>Dollars</i>	<i>Million Dollars</i>	<i>Dollars</i>
Dry bean and pea	14.70	Livestock	58.91
Cotton	40.35	Nut	8.76
		Poultry	6.59
Dairy	28.83	Rice	12.20
Less than 0.5	125.42	Sugar	9.17
0.5 - .99	166.20	Tobacco	38.28
1.0 - 2.49	66.65	Wool	16.24
2.5 - 24.99	76.67	Fishery	8.05
25.0 and more	23.53	Misc. Marketing	5.15
Fruit and vegetable	9.54	Farm supply	9.86
Less than 0.5	49.20	Less than 0.5	12.04
0.5 - .99	31.85	0.5 - .99	8.54
1.0 - 2.49	32.87	1.0 - 2.49	10.19
2.5 - 24.99	11.81	2.5 - 24.99	9.76
25.0 and more	7.77	25.0 and more	9.92
Fruit and vegetable	9.54	Cotton gin	7.60
Fresh only	13.37	Less than 0.5	4.05
Processed only	7.68	0.5 - .99	6.06
Fresh and processed	8.37	1.0 - 2.49	8.15
		2.5 and more	7.71
Grain and oilseed	20.56	Other service	2.85
Less than 0.5	30.24	Less than 0.5	2.99
0.5 - .99	19.25	0.5 - .99	2.48
1.0 - 2.49	26.28	1.0 - 2.49	2.62
2.5 - 24.99	20.11	2.5 and more	2.88
25.0 and more	20.84		

¹ Labor expense includes wages and salaries, payroll taxes, employee benefits, and director fees. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included.

ly increased 4 percent,² due to both lower commodity prices and lower prices paid for production items in 1999.

Gross dollar volume of farm products marketed by cooperatives decreased 4.8 percent, from \$84.5 billion in 1998 to \$80.5 billion in 1999, due mainly to a 14.2-percent decrease in grain and oilseed marketings. The net volume of farm products marketed was \$72

billion, or 72.7 percent of the total net volume of all cooperatives, down 6.1 percent from \$76.6 billion in 1998.

Figure 8 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy (milk and milk products) led with 36.1 percent, followed by grains and oilseeds (excluding cottonseed) with 23.8 percent, and fruits and vegetables with 12.9 percent. The proportions of milk and milk products and fruit and vegetables were up compared with 1998, because of a significant drop in cooperatives' grain business volume in 1999.

Gross volume of all farm supplies handled by cooperatives was \$30.9 billion, down 6.3 percent from \$33 billion in 1998. Net farm supply volume of nearly

² Deflated 1999 cooperative business volume was \$103 billion, up 4 percent from the actual \$99.1 billion in 1999. The \$103 billion was derived by deflating farm products marketed by the index of prices received for all farm products and farm supplies (inputs) and service income by the index of prices paid by farmers for all production items adjusted for 1998 = 100.

Table 7— **Farmer cooperatives and memberships, by gross business volume, 1999¹**

Volume group (mil. dol.)	Cooperatives		Dollar volume		Memberships ³	
	Number	Percent of total	Gross ² (mil. dol.)	Percent of total	Number (1,000)	Percent of total
Less than \$5.0	1,719	49.6	3,345	2.9	724	22.8
5 - 9.9	657	19.0	4,666	4.0	414	13.1
10 - 14.9	306	8.8	3,748	3.3	277	8.7
15 - 24.9	281	8.1	5,415	4.7	257	8.1
25 - 49.9	262	7.5	9,178	8.0	341	10.8
50 - 99.9	129	3.7	8,878	7.7	282	8.9
100 - 199.9	37	1.1	5,429	4.7	64	2.0
200 - 499.9	38	1.1	11,460	9.9	185	5.8
500 - 999.9	20	0.6	13,211	11.5	133	4.2
1,000 and more	17	0.5	49,962	43.3	496	15.6
Total ⁴	3,466	100.0	115,291	100.0	3,173	100.0

¹ Business volume includes revenues from marketing plus the value of products bargained for or handled on a commission basis, supply sales, service receipts, and other income.

² Includes intercooperative business volume.

³ Includes number of farmers, ranchers, and fishermen eligible to vote for directors. Does not include memberships held by other cooperatives, such as local cooperative memberships in regional cooperatives.

⁴ Totals may not add due to rounding.

Figure 7— **Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 1999**

Percent

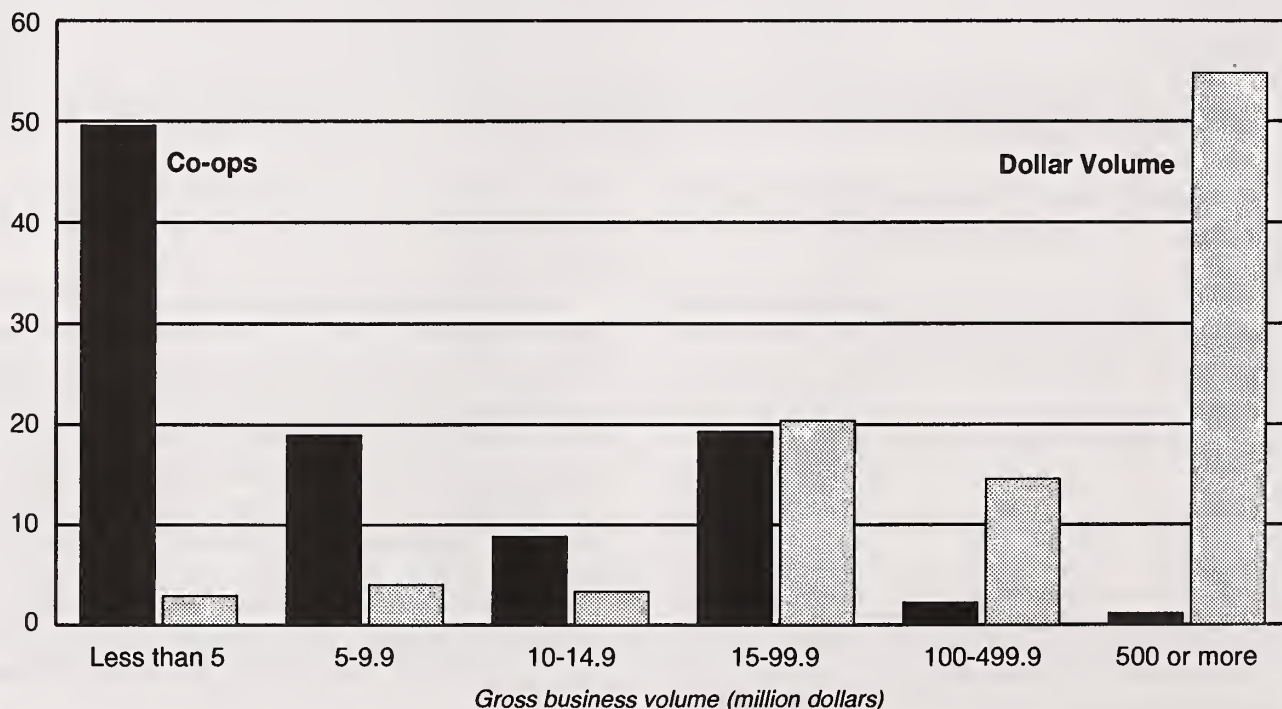


Table 8—Cooperatives' gross and net business volumes by commodity, 1999¹

Commodity	Gross volume		Net volume	
	Million dollars	Percent	Million dollars	Percent
Products marketed:				
Beans and peas (dry edible)	174.9	0.2	174.9	0.2
Cotton	2,175.1	1.9	2,083.4	2.1
Dairy	28,461.1	24.7	25,999.1	26.3
Fruits and vegetables	10,103.2	8.8	9,285.6	9.4
Grains and oilseeds, excluding cottonseed	21,748.9	18.9	17,113.1	17.3
Livestock	7,371.1	6.4	7,318.9	7.4
Nuts	899.1	0.8	899.1	0.9
Poultry ³	2,225.9	1.9	2,225.9	2.3
Rice	911.7	0.8	911.7	0.9
Sugar	2,691.4	2.3	2,540.0	2.6
Tobacco	278.4	0.2	278.4	0.3
Wool and mohair	9.1	(²)	6.4	(²)
Miscellaneous ⁴	3,456.3	3.0	3,145.5	3.2
Total farm products	80,506.3	69.8	71,981.9	72.7
Supplies purchased:				
Crop protectants	3,756.5	3.3	3,018.3	3.1
Feed	6,383.8	5.5	4,725.6	4.8
Fertilizer	7,251.8	6.3	4,758.6	4.8
Petroleum	8,142.3	7.1	6,259.8	6.3
Seed	1,072.0	0.9	752.1	0.8
Other supplies ⁵	4,272.8	3.7	3,662.9	3.7
Total farm supplies	30,879.2	26.8	23,177.3	23.4
Services provided:				
Trucking, cotton ginning, storage, grinding, locker plants, misc. ⁶	3,905.1	3.4	3,905.1	3.9
Total business	115,290.6	100.0	99,064.3	100.0

¹ Gross includes and net excludes inter-cooperative business. Totals may not add due to rounding.

² Less than 0.05 percent.

³ Includes eggs, turkeys, ratite, squab, and related products.

⁴ Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, other farm products not separately classified, and sales of farm products not received directly from member-patrons. Also includes manufactured food products and resale items marketed by cooperatives.

⁵ Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.

⁶ Charges for services related to marketing or purchasing not included in the volume reported for those activities, plus other income.

\$23.2 billion, down 5.6 percent from \$24.6 billion, accounted for 23.4 percent of the total net business volume.

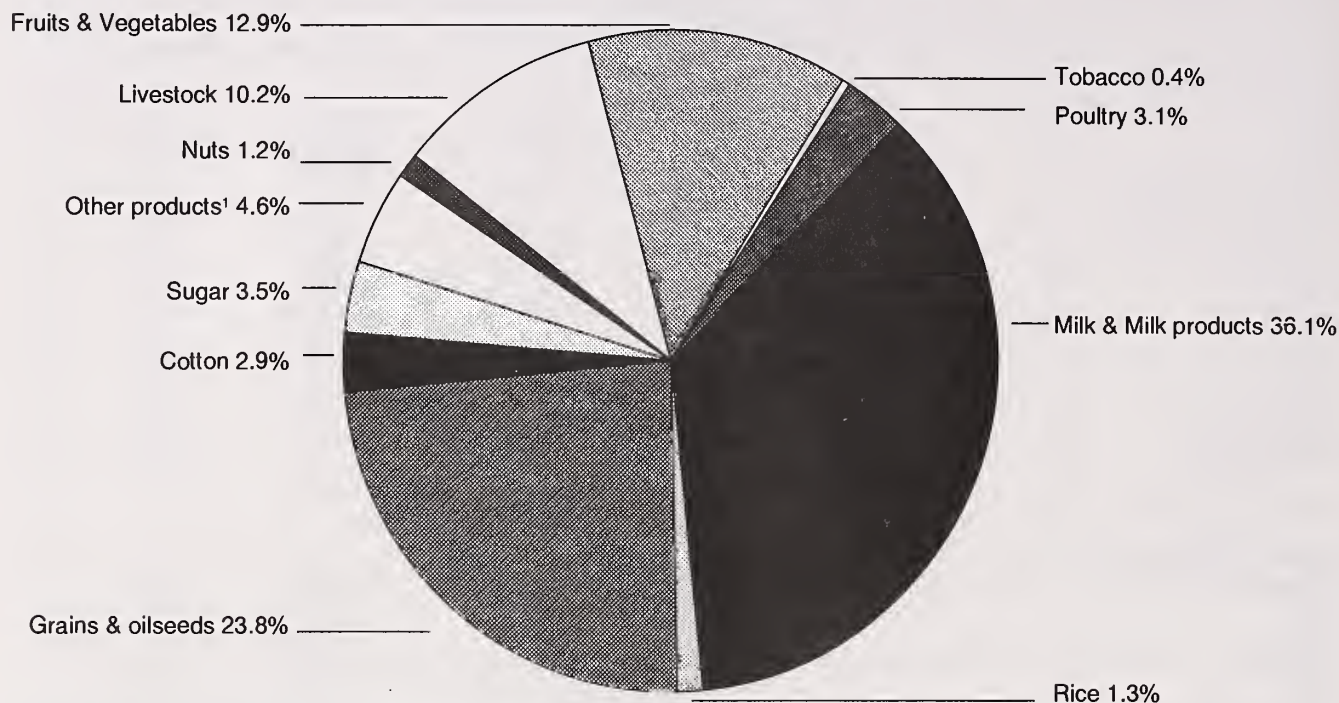
The leading farm production supplies handled by cooperatives in terms of net business volume were petroleum, 27 percent; fertilizer, 20.5; and feed, 20.4 percent (figure 9). While sales of "other" supplies and seed were up in 1999, feed, fertilizer, petroleum and crop protectants were down.

Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus

other income, were up 12.4 percent to \$3.9 billion. Service receipts and other income represented 3.9 percent of total net business volume.

Table 9 shows gross and net business volume by State. Sales were allocated to the States in which the product marketed was originated and the farm supplies were sold. Minnesota was the leading State in total gross and net business volume, with \$11.5 billion and \$9.3 billion, respectively. Iowa was second in gross business (\$9.7 billion) and third in net business volume (\$7.9 billion). Wisconsin ranked second in net business volume (\$8 billion).

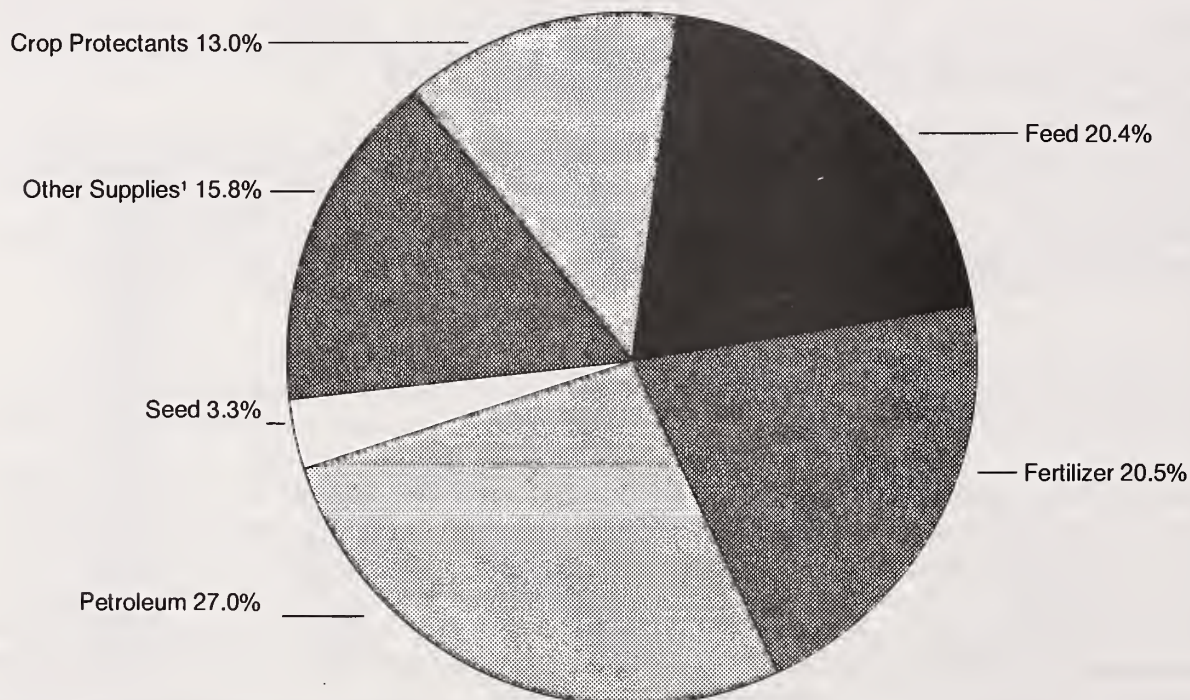
Figure 8— Relative Importance of Farm Products Marketed by Cooperatives, 1999



Percentage based on a total net marketing business volume of \$72 billion.

¹ Includes dry beans and peas, wool and mohair, fish, and other miscellaneous marketings.

Figure 9— Relative Importance of Farm Supplies Handled by Cooperatives, 1999



Percentage based on a net farm supply business volume of \$23.2 billion.

¹ Includes building materials: tires, batteries and accessories; equipment; animal health products; pet food; semen; hardware; food; clothing; etc.

Table 9— Cooperatives' business volume¹, by commodity and State, 1999²

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
PRODUCTS MARKETED:			FRUITS AND VEGETABLES (Continued)		
BEANS AND PEAS, DRY EDIBLE			Idaho	325,974	325,974
California	28,880	28,880	Maine	7,608	7,608
North Dakota	34,220	34,220	Massachusetts	504,928	504,928
Other States	111,811	111,811	Michigan	754,320	608,765
United States	174,910	174,910	Minnesota	1,680	1,680
COTTON			New Jersey	192,405	192,405
California	338,669	301,339	New York	596,669	492,360
Mississippi	344,347	335,916	North Carolina	31,567	30,411
Texas	643,255	603,575	North Dakota	13,280	13,280
Other States	848,669	842,516	Ohio	5,797	5,797
Foreign ³	164	90	Oregon	441,857	437,449
United States	2,175,104	2,083,436	Pennsylvania	360,796	345,989
DAIRY			Texas	49,526	49,526
California	2,391,308	2,227,535	Washington	1,069,619	1,052,079
Illinois	1,556,857	1,332,245	Other States	679,937	640,424
Iowa	1,479,705	1,339,633	Foreign ³	63,306	63,306
Massachusetts	61,851	59,296	United States	10,103,179	9,285,557
Minnesota	3,538,065	3,077,872	GRAINS AND OILSEEDS, EXCLUDING COTTONSEED		
New Mexico	445,266	445,261	California	17,886	17,886
New York	1,919,806	1,595,244	Colorado	245,902	219,298
North Dakota	299,275	269,538	Idaho	74,986	49,333
Ohio	171,496	167,011	Illinois	1,937,955	1,796,586
Oregon	368,274	365,447	Indiana	540,602	520,887
Pennsylvania	417,285	384,182	Iowa	3,246,310	2,706,494
Texas	778,184	778,134	Kansas	2,428,666	1,863,224
Virginia	384,041	351,796	Michigan	93,916	87,265
Wisconsin	6,016,152	5,375,842	Minnesota	3,028,311	2,162,165
Other States	8,550,276	8,155,556	Mississippi	99,614	97,834
Foreign ³	83,300	74,554	Missouri	900,105	539,806
United States	28,461,141	25,999,144	Montana	294,975	175,777
FRUITS AND VEGETABLES			Nebraska	2,382,799	1,796,787
Arizona	329,596	269,241	North Dakota	1,531,751	1,163,718
Arkansas	902	902	Ohio	793,111	770,065
California	3,474,530	3,148,643	Oklahoma	472,981	330,938
Colorado	20,239	20,239	South Dakota	1,156,173	953,379
Florida	1,166,016	1,061,925	Texas	689,855	436,886
Hawaii	12,626	12,626	Washington	487,736	430,194
			Other States	1,113,111	880,156
			Foreign ³	212,139	114,372
			United States	21,748,886	17,113,050

Continued

Table 9—Cooperatives' business volume¹, by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
LIVESTOCK			SUGAR		
Alabama	58,490	58,490	Idaho	474,175	474,175
Hawaii	17,490	17,490	Louisiana	353,946	202,547
Idaho	81,420	81,420	Michigan	103,740	103,740
Illinois	473,529	473,438	Minnesota	728,081	728,081
Indiana	115,107	115,098	Montana	61,962	61,962
Kentucky	117,388	117,388	Wyoming	41,178	41,178
Mississippi	52,320	52,320	Other States	922,995	922,995
Missouri	890,096	890,096	Foreign ³	5,314	5,314
North Dakota	95,529	95,529			
Ohio	460,160	460,160	United States	2,691,391	2,539,992
Virginia	17,666	17,666			
West Virginia	3,245	3,245	TOBACCO		
Wisconsin	526,085	526,077	Kentucky	133,615	133,615
Other States	4,462,191	4,410,063	North Carolina	109,145	109,145
Foreign ³	376	376	Tennessee	27,550	27,550
			Virginia	4,559	4,559
United States	7,371,091	7,318,854	Other States	3,554	3,554
			United States	278,422	278,422
NUTS			WOOL AND MOHAIR		
California	602,102	602,102	Idaho	11	11
Other States	297,008	297,008	Montana	224	224
United States	899,111	899,111	North Dakota	10	10
POULTRY ⁴			Ohio	678	235
California	37,256	37,256	Pennsylvania	112	112
Utah	114,732	114,732	Utah	692	692
Other States	2,073,892	2,073,892	Virginia	26	26
United States	2,225,880	2,225,880	West Virginia	135	135
RICE			Wyoming	157	157
California	217,711	217,711	Other States	6,989	4,662
Louisiana	21,179	21,179	Foreign ³	87	87
Texas	60,682	60,682			
Other States	612,160	612,160	United States	9,121	6,350
United States	911,732	911,732	MISCELLANEOUS MARKETING⁵		
			Alaska	14,119	14,119
			California	91,664	91,664
			Florida	18,231	18,231
			Georgia	6,050	6,050
			Hawaii	26,572	26,572
			Maine	31,859	31,859
			Minnesota	920,260	810,166

Continued

Table 9—Cooperatives' business volume¹, by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
MISCELLANEOUS MARKETING⁵(Continued)			TOTAL FARM PRODUCTS MARKETING (Continued)		
Mississippi	137,475	120,447	Tennessee	151,720	138,347
North Dakota	197,694	197,694	Texas	2,961,504	2,615,597
Washington	87,543	74,133	Utah	210,790	195,101
Other States	1,898,039	1,728,164	Vermont	416,484	408,176
Foreign ³	26,813	26,402	Virginia	469,349	437,104
United States	3,456,319	3,145,501	Washington	2,701,409	2,610,720
			West Virginia	42,768	40,134
			Wisconsin	7,156,158	6,481,057
			Wyoming	63,376	62,901
			Other States	279,961	220,195
			Foreign ³	391,500	284,501
			United States	80,506,288	71,981,941
TOTAL FARM PRODUCTS MARKETING			FARM SUPPLIES PROVIDED:		
Alabama	706,811	706,785	CROP PROTECTANTS		
Alaska	14,495	14,495	Alabama	76,511	28,434
Arizona	949,078	883,380	Arkansas	99,802	83,236
Arkansas	1,206,982	1,194,894	California	28,938	28,755
California	7,328,083	6,799,736	Colorado	44,013	41,232
Colorado	497,514	470,911	Florida	15,316	11,805
Florida	2,114,760	1,968,093	Georgia	193,722	188,963
Georgia	1,387,585	1,340,123	Idaho	28,636	20,144
Hawaii	95,283	92,077	Illinois	476,224	301,045
Idaho	1,134,005	1,108,352	Indiana	168,290	160,106
Illinois	4,028,635	3,654,165	Iowa	481,081	380,386
Indiana	1,108,416	1,008,123	Kansas	133,663	118,893
Iowa	6,073,909	5,354,438	Kentucky	59,628	53,475
Kansas	4,093,908	3,528,022	Louisiana	26,174	22,300
Kentucky	366,517	364,617	Maryland	16,928	15,933
Louisiana	651,920	438,089	Massachusetts	2,339	2,339
Maine	98,113	95,839	Michigan	30,681	29,834
Maryland	194,035	169,140	Minnesota	323,664	263,001
Massachusetts	570,759	568,203	Mississippi	33,150	28,498
Michigan	1,707,249	1,539,374	Missouri	112,255	85,933
Minnesota	8,571,499	7,082,996	Montana	40,086	31,603
Mississippi	710,559	682,767	Nebraska	212,021	177,112
Missouri	4,003,112	3,614,577	New Jersey	4,801	4,801
Montana	428,821	309,623	New York	35,419	34,507
Nebraska	3,863,529	3,266,602	North Dakota	147,742	120,103
New Jersey	222,141	221,001	Ohio	100,210	100,004
New Mexico	536,011	535,769	Oklahoma	24,780	23,688
New York	2,872,867	2,441,145	Oregon	54,397	47,509
North Carolina	579,016	536,358	Pennsylvania	31,100	31,100
North Dakota	2,593,092	2,195,322	South Dakota	157,591	131,956
Ohio	1,677,851	1,622,999			
Oklahoma	1,152,622	1,007,188			
Oregon	1,281,292	1,175,412			
Pennsylvania	878,293	830,383			
South Carolina	112,160	108,589			
South Dakota	1,850,348	1,558,521			

Continued

Table 9— **Cooperatives' business volume¹, by commodity and State, 1999²** (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
<i>1,000 dollars</i>			<i>1,000 dollars</i>		
CROP PROTECTANTS (Continued)			FEED (Continued)		
Tennessee	120,347	65,042	Virginia	122,279	113,706
Texas	63,024	60,612	Washington	114,811	39,955
Utah	11,213	11,035	West Virginia	18,851	17,202
Virginia	29,353	24,809	Wisconsin	462,008	289,175
Washington	72,122	60,674	Wyoming	6,888	6,170
West Virginia	884	884	Other States	324,854	266,094
Wisconsin	170,560	131,859	Foreign ³	136,482	66,912
Wyoming	8,874	8,726			
Other States	94,179	87,099	United States	6,383,838	4,725,594
Foreign ³	26,759	840			
United States	3,756,479	3,018,275			
FEED			FERTILIZER		
Alabama	263,928	228,724	Alabama	106,041	65,268
Arkansas	103,677	79,012	Arkansas	110,609	87,431
California	157,821	107,580	California	105,663	94,500
Colorado	55,732	41,067	Colorado	113,784	93,730
Florida	90,307	88,484	Florida	132,638	44,237
Georgia	285,619	281,326	Georgia	69,799	58,946
Idaho	35,826	10,517	Idaho	61,685	40,416
Illinois	250,515	188,676	Illinois	742,559	415,740
Indiana	101,665	85,891	Indiana	263,891	209,884
Iowa	960,511	650,494	Iowa	790,378	500,807
Kansas	226,131	167,029	Kansas	354,083	285,234
Kentucky	57,589	51,965	Kentucky	130,979	105,667
Louisiana	41,692	27,049	Louisiana	28,041	24,233
Maryland	41,252	38,556	Maryland	27,252	25,638
Massachusetts	18,707	18,707	Massachusetts	3,360	3,360
Michigan	63,746	61,145	Michigan	55,056	50,439
Minnesota	604,214	420,152	Minnesota	609,418	358,865
Mississippi	82,863	53,268	Mississippi	57,198	47,900
Missouri	214,496	158,005	Missouri	323,851	225,478
Montana	18,857	18,450	Montana	92,778	62,926
Nebraska	234,824	158,613	Nebraska	407,408	301,907
New Jersey	14,588	14,469	New Jersey	6,422	6,422
New York	129,218	121,263	New York	60,900	54,112
North Dakota	56,216	44,431	North Dakota	354,210	203,830
Ohio	120,657	119,631	Ohio	203,347	140,411
Oklahoma	86,334	64,833	Oklahoma	136,871	95,680
Oregon	126,407	37,526	Oregon	114,014	90,085
Pennsylvania	106,980	106,257	Pennsylvania	44,002	43,857
South Dakota	218,976	179,752	South Dakota	254,979	167,937
Tennessee	185,282	111,062	Tennessee	218,588	105,624
Texas	168,508	121,695	Texas	226,566	143,789
Utah	74,524	70,754	Utah	28,442	26,883
			Virginia	78,629	74,311
			Washington	95,257	76,540
			West Virginia	11,553	9,359

Continued

Table 9—Cooperatives' business volume¹, by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
FERTILIZER (continued)			PETROLEUM (continued)		
Wisconsin	284,719	193,122	Wisconsin	551,439	484,625
Wyoming	26,225	21,814	Wyoming	114,149	104,007
Other States	156,703	140,832	Other States	95,742	91,813
Foreign ³	363,930	61,392	Foreign ³	91,774	60,790
United States	7,251,827	4,758,603	United States	8,142,266	6,259,807
PETROLEUM			SEED		
Alabama	5,394	4,665	Alabama	66,868	15,143
Arkansas	64,938	57,075	Arkansas	28,446	28,253
California	6,049	4,851	California	17,792	17,792
Colorado	240,186	179,988	Colorado	4,090	4,089
Florida	6,965	6,790	Florida	19,855	15,910
Georgia	55,256	43,603	Georgia	6,367	5,856
Idaho	112,241	95,430	Idaho	20,703	6,181
Illinois	508,820	417,297	Illinois	111,449	67,215
Indiana	373,357	279,410	Indiana	35,995	26,032
Iowa	734,837	522,885	Iowa	103,810	62,304
Kansas	899,544	321,019	Kansas	14,401	14,401
Kentucky	134,477	85,481	Kentucky	30,616	28,830
Louisiana	9,364	8,544	Louisiana	9,498	9,370
Maryland	56,698	51,487	Maryland	9,878	9,240
Massachusetts	11,675	11,675	Massachusetts	1,100	1,100
Michigan	91,825	80,083	Michigan	9,404	9,404
Minnesota	712,220	543,442	Minnesota	64,306	48,170
Mississippi	18,336	16,303	Mississippi	18,776	18,521
Missouri	429,060	391,454	Missouri	91,694	35,630
Montana	207,832	179,308	Montana	10,006	6,779
Nebraska	471,912	376,582	Nebraska	20,752	15,912
New Jersey	26,389	26,389	New Jersey	2,121	2,121
New York	186,910	182,510	New York	17,128	17,128
North Dakota	336,612	288,090	North Dakota	33,565	28,723
Ohio	110,336	97,568	Ohio	29,330	29,330
Oklahoma	150,965	109,539	Oklahoma	4,777	4,777
Oregon	168,271	151,795	Oregon	12,014	12,014
Pennsylvania	168,729	166,927	Pennsylvania	14,339	14,339
South Dakota	273,185	239,992	South Dakota	26,959	21,796
Tennessee	137,210	98,379	Tennessee	68,588	37,777
Texas	146,197	102,218	Texas	16,577	16,577
Utah	57,289	47,187	Utah	3,201	3,144
Virginia	166,058	144,544	Virginia	26,501	25,097
Washington	203,649	179,684	Washington	25,636	24,023
West Virginia	6,378	6,378	West Virginia	4,267	4,011

Continued

Table 9— **Cooperatives' business volume¹, by commodity and State, 1999²** (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
SEED (Continued)			MISCELLANEOUS SUPPLIES⁶ (Continued)		
Wisconsin	52,722	33,778	Wisconsin	249,551	242,808
Wyoming	627	624	Wyoming	54,225	53,265
Other States	32,229	30,182	Other States	207,871	189,785
Foreign ³	5,607	552	Foreign ³	44,437	15,176
United States	1,071,992	752,122	United States	4,272,821	3,662,883
MISCELLANEOUS SUPPLIES⁶			TOTAL FARM SUPPLIES		
Alabama	116,632	103,322	Alabama	635,375	445,556
Arkansas	61,749	58,877	Arkansas	469,222	393,884
California	99,876	76,767	California	416,139	330,245
Colorado	69,273	59,225	Colorado	527,078	419,331
Florida	170,667	166,225	Florida	435,748	333,451
Georgia	87,841	81,378	Georgia	698,605	660,072
Idaho	40,883	38,234	Idaho	299,975	210,921
Illinois	137,753	97,059	Illinois	2,227,319	1,487,032
Indiana	80,034	68,397	Indiana	1,023,231	829,719
Iowa	243,751	183,790	Iowa	3,314,367	2,300,666
Kansas	114,718	86,875	Kansas	1,742,539	993,451
Kentucky	84,764	73,832	Kentucky	498,052	399,250
Louisiana	16,753	15,801	Louisiana	131,522	107,296
Maryland	39,641	36,132	Maryland	191,650	176,986
Massachusetts	13,266	13,222	Massachusetts	50,447	50,402
Michigan	106,022	102,041	Michigan	356,735	332,947
Minnesota	262,306	222,648	Minnesota	2,576,129	1,856,279
Mississippi	53,583	51,359	Mississippi	263,907	215,849
Missouri	119,371	75,119	Missouri	1,290,727	971,618
Montana	72,820	69,963	Montana	442,381	369,030
Nebraska	125,668	108,379	Nebraska	1,472,585	1,138,503
New Jersey	35,849	34,936	New Jersey	90,169	89,137
New York	156,367	152,157	New York	585,942	561,676
North Dakota	116,651	109,274	North Dakota	1,044,995	794,451
Ohio	88,828	82,051	Ohio	652,709	568,996
Oklahoma	43,323	35,065	Oklahoma	447,050	333,582
Oregon	163,777	159,685	Oregon	638,881	498,615
Pennsylvania	149,560	149,152	Pennsylvania	514,709	511,630
South Dakota	105,497	94,922	South Dakota	1,037,186	836,355
Tennessee	258,295	145,399	Tennessee	988,311	563,283
Texas	96,177	83,168	Texas	717,048	528,060
Utah	47,411	44,381	Utah	222,080	203,383
Virginia	169,526	145,370	Virginia	592,347	527,837
Washington	158,201	127,739	Washington	669,676	508,614
West Virginia	9,904	9,904			

Continued

Table 9—Cooperatives' business volume¹, by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
TOTAL FARM SUPPLIES (Continued)			TOTAL: (Continued)		
West Virginia	51,837	47,739	Hawaii	122,525	103,807
Wisconsin	1,770,999	1,375,366	Idaho	1,446,412	1,331,705
Wyoming	210,987	194,606	Illinois	6,430,795	5,316,036
Other States	911,577	805,806	Indiana	2,225,018	1,931,213
Foreign ³	668,988	205,662	Iowa	9,665,341	7,932,170
United States	30,879,223	23,177,285	Kansas	5,973,848	4,658,873
			Kentucky	873,968	773,265
			Louisiana	802,249	564,193
SERVICES PROVIDED⁷:			Maine	205,558	203,284
Alabama	17,252	17,252	Maryland	391,835	352,277
Arizona	23,858	23,858	Massachusetts	630,330	627,730
Arkansas	54,421	54,421	Michigan	2,116,737	1,925,074
California	693,568	693,568	Minnesota	11,514,242	9,305,888
Georgia	6,337	6,337	Mississippi	1,025,276	949,425
Hawaii	8,248	8,248	Missouri	5,568,086	4,860,441
Illinois	174,840	174,840	Montana	878,274	685,725
Louisiana	18,807	18,807	Nebraska	5,474,400	4,543,391
Michigan	52,753	52,753	New Jersey	315,157	312,984
Minnesota	366,614	366,614	New Mexico	566,459	554,906
Mississippi	50,809	50,809	New York	3,691,278	3,235,290
New Mexico	3,467	3,467	North Carolina	908,477	825,510
New York	232,470	232,470	North Dakota	3,689,653	3,041,338
North Carolina	24,438	24,438	Ohio	2,415,868	2,277,303
North Dakota	51,565	51,565	Oklahoma	1,645,397	1,386,496
Ohio	85,309	85,309	Oregon	1,962,678	1,716,532
Oklahoma	45,725	45,725	Pennsylvania	1,404,029	1,353,040
Pennsylvania	11,027	11,027	South Carolina	255,424	246,516
Texas	257,212	257,212	South Dakota	2,943,710	2,451,052
Virginia	31,746	31,746	Tennessee	1,168,383	729,982
Washington	205,828	205,828	Texas	3,935,764	3,400,868
Wisconsin	162,042	162,042	Utah	495,847	461,461
Other States	1,326,757	1,326,757	Vermont	480,544	471,561
United States	3,905,094	3,905,094	Virginia	1,093,442	996,687
			Washington	3,576,913	3,325,162
TOTAL:			West Virginia	95,435	88,703
Alabama	1,359,438	1,169,594	Wisconsin	9,089,199	8,018,466
Alaska	92,867	76,496	Wyoming	275,669	258,813
Arizona	1,002,570	927,983	Other States	101,652	96,004
Arkansas	1,730,624	1,643,198	Foreign ³	1,060,487	490,163
California	8,437,790	7,823,548	U.S.	115,290,605	99,064,320
Colorado	1,063,167	928,817			
Connecticut	228,238	175,897			
Delaware	98,885	89,741			
Florida	2,668,142	2,419,178			
Georgia	2,092,527	2,006,532			

See footnotes next page

Table 9.

- ¹ Data covering operations of cooperatives whose business years ended in calendar 1999. Includes independent local cooperatives, federations, centralized regionals, and those with mixed organizational structures. Products marketed were allocated to the States in which they were originated and farm supply sales were allocated to the States in which they were sold; service volume and other income were allocated to the States of origin when services related to farm products marketed or to the State of destination when related to farm supplies sold.
- ² Gross business volume includes sales between cooperatives while net business volume excludes such sales. States listed had more than two cooperatives handling the commodity or farm supply or where disclosure was not a problem. Totals may not add due to rounding.
- ³ Includes value of farm products imported, farm supplies exported, services related to imported farm products or exported farm supplies, sales to domestic military installations, or sales of farm products not received directly from member-patrons.
- ⁴ Includes eggs, turkeys, ratite, squab, and related products.
- ⁵ Includes forest products, hay, hops, nursery stock, fish, coffee, seed marketed for growers, and other farm products not separately classified. Also includes manufactured food products and resale items marketed by cooperatives.
- ⁶ Includes building supplies, containers and packaging supplies, farm machinery and equipment, animal health products, automotive supplies, food, hardware, chicks, and other supplies not separately classified.
- ⁷ Income from services related to marketing and purchasing activities not included in the volumes reported for these activities.

In 1999, Iowa was the leading State in both gross and net sales of farm supplies, with \$3.3 billion and \$2.3 billion, respectively. Minnesota was second.

Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 1999 was \$1.3 billion, including inter-cooperative dividends and refunds (table 10). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 23.8 percent from the \$1.7 billion in 1998. Patronage refunds received from other cooperatives, including CoBank, totaled \$383.5 million, down 33.1 percent from \$573 million in 1998.

Marketing cooperatives' total net income of \$871.1 million was down 14.4 percent from the \$1,017.5 million generated in 1998. The drop in net income was mainly due to decreased net income by dairy and grain cooperatives. However, grain and dairy cooperatives together, accounted for most (69 percent) of marketing cooperatives' net income and 45.3 percent of total net income (figure 10).

Total net income of farm supply cooperatives was \$352.5 million in 1999, down 39.1 percent from \$578.8 million in 1998. They accounted for 26.5 percent of cooperatives' total net income in 1999, compared with 33.2 percent in 1998. Income from their own operations, excluding patronage refunds from other cooperatives and CoBank, was \$183 million, down 39.3 percent from \$301.6 million in 1998.

Farmer cooperatives' net income from own operations in 1999 totaled \$944.5 million, down 19.2 percent from \$1,169.3 million. Nearly 28.9 percent, or \$383.5 million, of total net income (\$1,328.1 million) was generated by other cooperatives and CoBank, down 33.1 percent from \$573 in 1998. The proportion generated by other cooperatives in 1998 was 32.9 percent. Marketing cooperatives' net income from other cooperatives, including CoBank, totaled \$184.2 million and accounted for 21.1 percent of their total, down from \$269.3 million and 26.5 percent in 1998. Grain cooperatives' net income from other cooperatives totaled \$125.9 million, or 38.8 percent of their total, down from \$200.1 million, or 45.3 percent in 1998.

Income before adjusting for losses was \$1,612.2 million. Losses totaled \$284.1 million in 1999, down from \$379.9 million in 1998. Number of cooperatives with losses was down significantly, from 601 to 522. The decrease in losses for 1999 was mainly due to decreased losses by livestock and poultry cooperatives, from \$148.2 million in 1998 to \$9.9 million in 1999.

Marketing cooperative losses totaled \$153.6 million in 1999, compared with \$337.7 million in 1998. Related-service cooperative losses totaled \$6.4 million, compared with \$20.6 million. Losses among farm supply cooperatives were up significantly, from \$21.3 million in 1998 to \$124.1 million in 1999.

Table 10— Farmer cooperatives' net income, 1999

Principal product(s) marketed and major function	Co-ops ¹	Total net income	Income from own operations	Income from other co-ops ²
	<i>Number</i>	<i>----- Million dollars -----</i>		
Products marketed:				
Cotton	15	69.9	67.3	2.6
Dairy	221	276.6	251.6	25.0
Fruits & vegetables	231	57.9	44.5	13.4
Grains and oilseeds, excluding cottonseed	896	324.5	198.6	125.9
Livestock and poultry	96	61.7	50.9	10.8
Rice	17	6.1	3.9	2.2
Sugar	48	-21.1	-22.1	1.0
Other products ³	225	95.4	92.2	3.2
Total marketing	1,749	871.1	686.9	184.2
Total farm supply	1,313	352.5	183.0	169.5
Total related-service	404	104.5	74.7	29.8
Combined total⁴	3,466	1,328.1	944.5	383.5

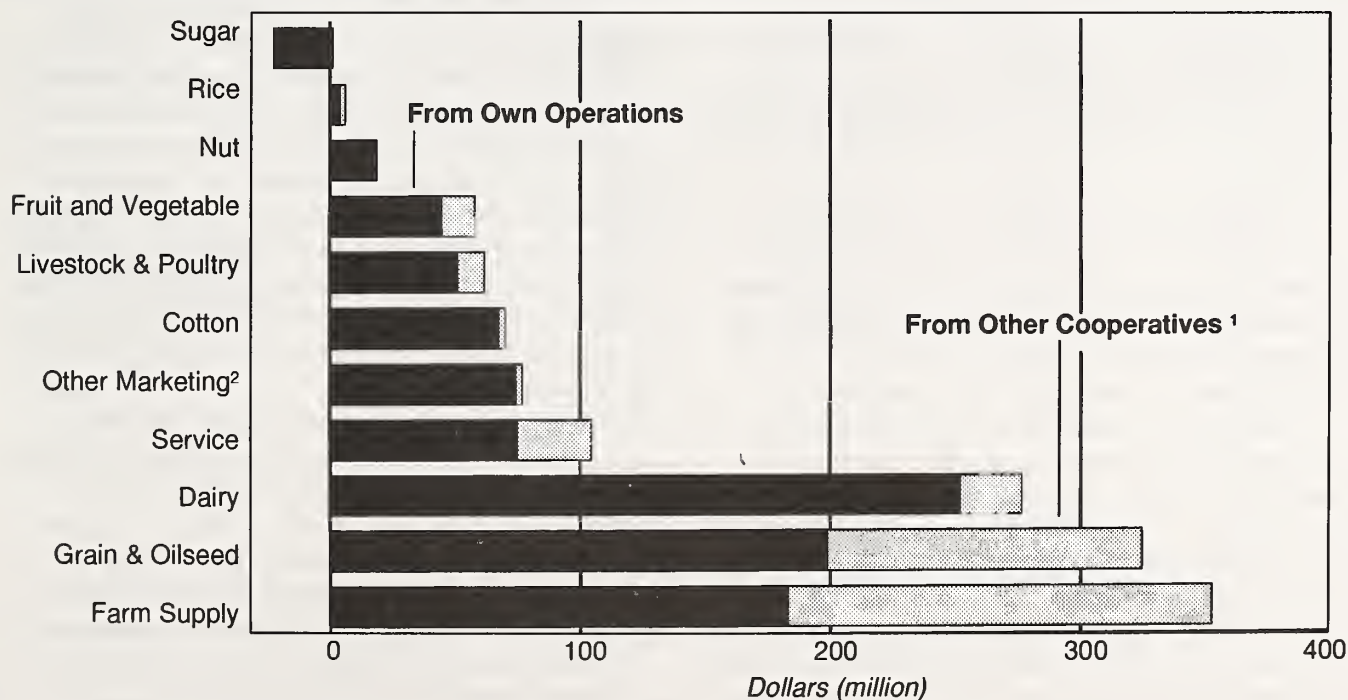
¹ Includes number of cooperatives operating on a strictly pooling basis, but not their pool proceeds.

² Includes patronage refunds from CoBank.

³ Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

⁴ Totals may not add due to rounding.

Figure 10— Net Income or Loss by Type of Cooperative, 1999



¹ Includes dividends and patronage refunds from other farmer cooperatives, and CoBank.

² Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

Table 11— Combined balance sheet data for farmer cooperatives, 1999¹

Principal product(s) marketed and major function	Co-ops	Total assets	Total liabilities	Net worth
	<i>Number</i>	<i>----- Million dollars -----</i>		
Products marketed:				
Cotton	15	909.7	519.7	390.0
Dairy	221	7,771.9	4,815.6	2,956.3
Fruits & vegetables	231	6,067.8	4,288.4	1,779.4
Grains and oilseeds, excluding cottonseed	896	7,015.5	3,543.1	3,472.4
Livestock and poultry	96	4,688.5	3,220.7	1,467.8
Rice	17	554.7	300.2	254.5
Sugar	48	2,224.8	1,321.4	903.4
Other products ²	225	3,101.8	1,504.7	1,597.1
Total marketing	1,749	32,334.7	19,513.9	12,820.9
Total farm supply	1,313	14,435.7	7,532.4	6,903.3
Total related-service	404	911.3	372.1	539.2
Combined total	3,466	47,681.7	27,418.3	20,263.4

¹ Totals may not add due to rounding.

² Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Balance Sheet

Combined assets for all farmer cooperatives totaled nearly \$47.7 billion in 1999, up 2.4 percent from \$46.6 billion in 1998 (table 11). The increase in total assets was partly due to a 14.4-percent increase in investments in other cooperatives, from \$4.7 billion in 1998 to \$5.4 billion in 1999. Total assets of cooperatives, excluding inter-cooperative investments, was up 1.1 percent to \$42.3 billion, compared with \$41.9 billion in 1998.

Total liabilities was \$27.4 billion, up 3.1 percent from \$26.6 billion in 1998. Net worth, or member and patron equity, was \$20.3 billion, up 1.6 percent from \$20 billion in 1998. The proportion of total assets financed by member and patron equity decreased slightly, from 42.9 percent to 42.5 percent.

Net worth, or member and patron equity, for all marketing cooperatives totaled \$12.8 billion, up 1.3 percent from 1998. Marketing cooperatives accounted for 63.3 percent of farmer cooperatives' combined net worth, down slightly from 63.4 percent in 1998. The net worth figure for farm supply cooperatives was 34.1 percent of the total, up from 33.9 percent. For marketing cooperatives, the highest percentage of total assets represented by net worth shown in figure 11 (51.5 percent) was for those marketing primarily "other" products. The lowest, 29.3 percent, was for cooperatives

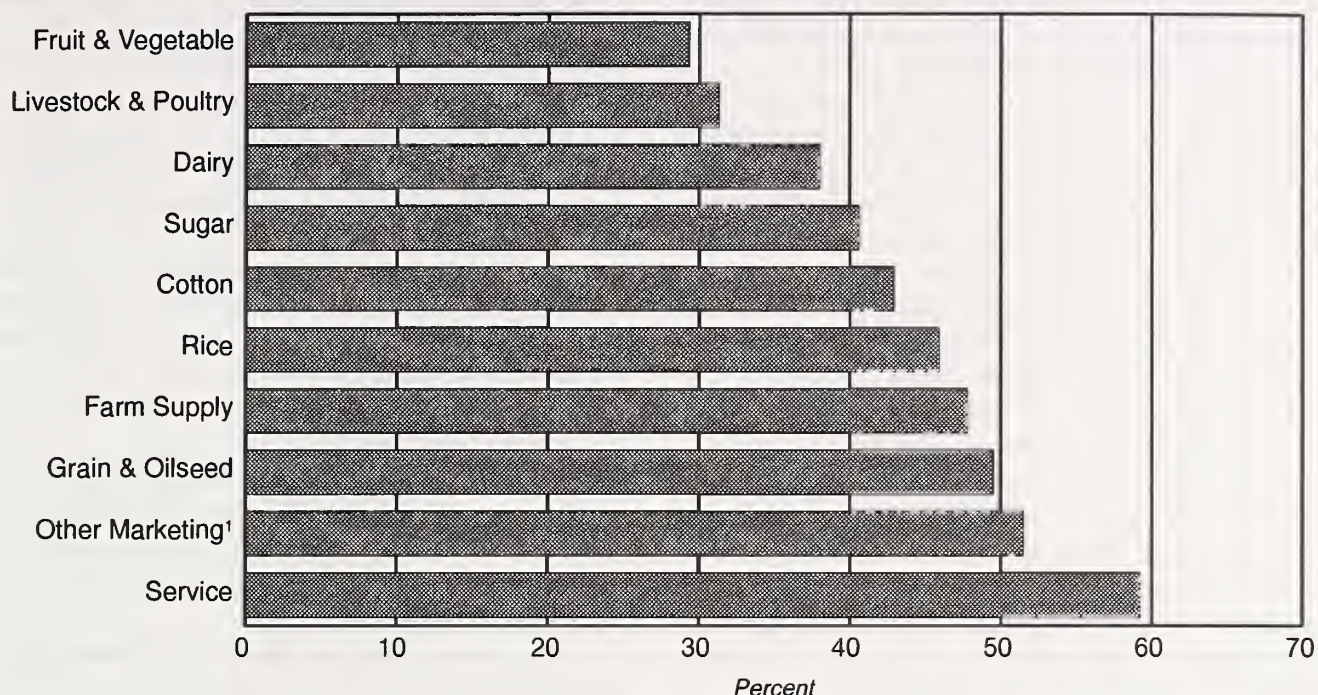
marketing primarily fruits and vegetables. Marketing and farm supply cooperatives had 39.7 percent and 47.8 percent, respectively, of their assets financed by net worth.

Of the \$47.7 billion in total assets, marketing cooperatives accounted for \$32.3 billion, up slightly (.9 percent) from 1998. Cooperatives primarily handling grains and oilseeds (excluding cottonseed) had total assets of \$7 billion in 1999, down 12.7 percent from \$8 billion in 1998. Among the marketing cooperatives, those with primarily grain also maintained the largest proportion of their assets as investments in other cooperatives in both 1999 (16.4 percent) and 1998 (15.5 percent). Dairy cooperatives had 15 percent of their assets invested in other cooperatives, up from 9.6 percent in 1998 (table 12).

Assets of marketing cooperatives, excluding investments in other cooperatives and CoBank, totaled \$29.2 billion, down 1.0 percent from \$29.5 billion in 1998.

Farm supply cooperatives had total assets of \$14.4 billion, compared with \$13.7 billion in 1998, up 5.7 percent. Excluding inter-cooperative investments, total assets was up 5.9 percent, from \$11.7 billion in 1998 to \$12.3 billion.

Figure 11— **Percentage of Cooperatives' Assets Financed by Net Worth, by Type of Cooperative, 1999**



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

Table 12— **Combined assets for farmer cooperatives, 1999¹**

Principal product(s) marketed and major function	Co-ops ²	Assets of own operations	Investments in other co-ops ³	Total assets	Investments in other co-ops as percent of total
	<i>Number</i>	<i>----- Million dollars -----</i>			<i>Percent</i>
Products marketed:					
Cotton	15	881.8	27.9	909.7	3.1
Dairy	221	6,606.6	1,165.4	7,771.9	15.0
Fruits & vegetables	231	5,861.0	206.8	6,067.8	3.4
Grains and oilseeds, excluding cottonseed	896	5,865.4	1,150.1	7,015.5	16.4
Livestock and poultry	96	4,201.8	486.7	4,688.5	10.4
Rice	17	538.1	16.6	554.7	3.0
Sugar	48	2,181.6	43.2	2,224.8	1.9
Other products ⁴	<u>225</u>	<u>3,029.0</u>	<u>72.8</u>	<u>3,101.8</u>	2.3
Total farm products	1,749	29,165.4	3,169.3	32,334.7	9.8
Total farm supplies	1,313	12,343.7	2,092.0	14,435.7	14.5
Total selected services	<u>404</u>	<u>821.0</u>	<u>90.3</u>	<u>911.3</u>	9.9
Combined total	3,466	42,330.1	5,351.6	47,681.7	11.2

¹ Totals may not add due to rounding.

² Many cooperatives have multiproduct and multifunctional operations. Most are classified according to predominant commodity or function, as indicated by business volume.

³ Also includes investments in CoBank.

⁴ Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Selected Financial Ratios

Financial ratios express relationships between items in the financial and income statements of a business operation and help in analyzing a cooperative's economic and financial situation.

Financial ratios can indicate problem areas. While they can't solve problems, they can serve as guidelines for planning and aid in formulating actions. Care must be taken in their use because both items used to calculate a ratio are subject to considerable variation. Ratio interpretation is largely subjective.

Five financial ratios were selected to indicate cooperative performance or financial condition--return on assets, net worth-to-assets, return on sales, total sales-to-assets, and the current ratio.

The return on assets and return on sales ratios indicate profitability. The net worth-to-assets ratio shows a cooperative's ability to meet long-term financial obligations. The total sales-to-asset ratio (asset turnover ratio) indicates how efficiently a cooperative is using its assets. The current ratio (current assets divided by current liabilities) best measures a cooperative's ability to meet short-run obligations.

Table 13 presents the values of these ratios for the cooperatives reporting to RBS. Extreme high and low values were excluded so those used would be more representative of the cooperatives reporting. Ratios are also shown by selected asset category for those cooperatives where sufficient information was available. These ratios offer cooperative leaders a general barometer to use in comparing their operations with others of the same type (and/or size).

The return on assets (net income/assets) varied considerably. It was negative for sugar, small cotton gins, small farm supply cooperatives, the smaller fruit and vegetable cooperatives, and livestock cooperatives with assets in the range of \$2.5 million to \$25 million. The ratio was highest (17.2) for the largest group of cotton ginning cooperatives. For dairy, the ratio was highest for those cooperatives with assets of \$25 million to \$99.9 million, similar to what was reported in 1998. Among grain cooperatives, the largest return (although small) came from the largest cooperatives.

The net worth-to-assets ratio ranged from a low of 25.1 percent for the largest fruit and vegetable cooperatives to a high of 99.4 percent for the tobacco cooperatives. Generally, as cooperatives become larger and/or do more processing, a declining percentage of their assets is financed by members, resulting in a lower net worth-to-assets ratio.

The return on sales (net income/total sales) ranged from a negative 6.9 percent for mid-sized live-

stock cooperatives to a high of 16.2 percent for the largest cotton ginning cooperatives. Few cooperatives generated a return on sales above 3 percent (only 11 of the 50 groups shown in table 13).

The sales-to-assets ratio ranged from a high of 52.9 for the small dairy (bargaining) cooperatives to a low of 0.4 for the tobacco cooperatives. Among dairy, fruit and vegetable, grain, and cotton ginning cooperatives, the ratio tended to decrease as cooperative size increased. Generally, this reflects the large investment in processing or manufacturing equipment typical of the larger dairy and fruit and vegetable cooperatives. The sales-to-assets ratios for farm supply cooperatives varied little with cooperative size. Most of these cooperatives are less involved in manufacturing or processing than the larger marketing cooperatives.

The generally high sales-to-assets ratios for the smaller cooperatives, as well as for some types of cooperatives, is due to bargaining activity or other marketing functions not requiring a major investment in plant and equipment.

The current ratio (current assets/current liabilities) ranged from a low of 1.1 for fruit and vegetable cooperatives with assets of \$25 million to \$99.9 million and sugar cooperatives, to 17.6 for tobacco cooperatives. Smaller cooperatives' current liabilities are generally low, but become larger in relation to current assets as business grows.

Crop Protectant Operations of Local Cooperatives

To conduct a special study of the crop protectant operations of local farm supply and marketing cooperatives, specific questions regarding the handling of crop protectants were included in the questionnaires. More than 380 local farm supply and marketing cooperatives provided information about their crop protectant sales, source, competition, type of competition, and services. These cooperatives represented 43 percent of all locals that sold crop protectants.

In 1999, crop protectant sales of respondents totaled \$830 million, or nearly 37 percent of all locals' crop protectant sales. The information gathered was compared with crop protectant sales data for the past nine years and to the results of a similar 1996 fertilizer study.

Questionnaires were mailed to local cooperatives with crop protectant sales in excess of \$0.5 million. Most were larger cooperatives, for which crop protectant sales averaged \$2.2 million, farm supply sales averaged \$10.6 million, and marketing sales averaged

Table 13— Selected financial ratios for cooperatives, 1999¹

Type of co-op and asset group (mil. dol.)	Return on assets ²	Net worth to assets ³	Return on sales ⁴	Sales to assets ⁵	Current ratio ⁶
	----- Percent -----		----- Number -----		
Cotton	7.8	42.6	2.8	2.8	1.5
Less than \$25	11.5	30.5	4.6	2.5	1.2
\$25 and more	7.4	43.6	2.7	2.8	1.5
Dairy ⁷	3.6	38.7	1.0	3.8	1.3
Less than \$.99	1.1	58.8	0.02	52.9	1.5
\$1.0 - \$2.49	7.3	47.5	0.6	11.6	1.3
\$2.5 - \$24.99	5.2	38.3	0.5	11.2	1.2
\$25.0 - \$99.99	7.6	38.3	1.3	5.8	1.2
\$100.0 and more	3.1	38.7	0.9	3.3	1.3
Fruit and vegetable	2.7	26.2	1.6	1.7	1.4
Less than \$0.5	-0.6	69.4	-0.02	28.1	2.8
\$0.5 - \$.99	-3.4	84.9	-0.1	25.4	4.1
\$1.0 - \$2.49	-2.7	54.3	-0.9	3.2	1.6
\$2.5 - \$24.99	10.4	36.1	3.7	2.8	1.2
\$25.0 - \$99.99	0.9	26.8	0.5	1.7	1.1
\$100.0 and more	2.5	25.1	1.6	1.6	1.5
Grain and oilseed ⁸	4.6	49.1	1.9	2.4	1.3
Less than \$.99	4.4	72.3	1.0	4.3	2.4
\$1.0 - \$2.49	3.7	68.2	1.1	3.4	2.0
\$2.5 - \$24.99	4.6	51.7	1.8	2.6	1.3
\$25.0 and more	4.7	43.0	2.2	2.1	1.2
Livestock ⁷	0.4	29.4	0.1	3.5	1.3
Less than \$2.49	1.7	68.6	0.1	23.3	3.1
\$2.5 - \$24.99	-11.3	29.9	-6.9	1.6	1.2
\$25.0 and more	0.5	29.4	0.2	3.5	1.3
Nut	2.9	42.5	1.6	1.8	1.9
Poultry	3.9	35.3	1.3	3.1	1.4
Rice	1.1	48.9	0.4	2.4	1.5
Sugar	-1.2	41.8	-1.2	1.0	1.1
Tobacco	5.7	99.4	14.3	0.4	17.6
Misc. marketing	2.7	53.2	1.5	1.9	1.6
Fishery	0.4	48.3	0.2	2.7	1.4
Farm supply	2.0	45.6	1.1	1.8	1.4
Less than \$0.5	-.5	77.4	-.2	2.3	3.2
\$0.5 - \$.99	3.0	71.3	1.5	2.0	2.3
\$1.0 - \$2.49	5.2	71.4	2.5	2.1	2.3
\$2.5 - \$24.99	4.9	59.9	2.6	1.9	1.5
\$25.0 - \$99.99	4.4	46.2	2.0	2.2	1.3
\$100.0 - \$499.99	5.2	46.9	3.3	1.6	1.4
\$500.0 and more	0.1	39.1	0.1	1.7	1.3
Artificial insemination	6.3	62.4	2.1	3.0	1.8

Continued

Table 13— Selected financial ratios for cooperatives, 1999¹(continued)

Type of co-op and asset group (mil. dol.)	Return on assets ²	Net worth to assets ³	Return on sales ⁴	Sales to assets ⁵	Current ratio ⁶
	----- Percent -----		----- Number -----		
Cotton gins	15.6	65.1	12.6	1.2	1.5
Less than \$0.5	-1.6	40.4	-1.1	1.4	1.3
\$0.5 - \$.99	8.9	59.0	5.0	1.8	1.8
\$1.0 - \$2.49	13.0	71.3	8.0	1.6	2.0
\$2.5 and more	17.2	63.9	16.2	1.1	1.4
Other service ⁹	6.2	48.5	7.3	0.9	1.3
Less than \$.99	1.8	73.6	1.2	1.6	1.3
\$1.0 - \$2.49	12.4	50.1	10.9	1.1	1.6
\$2.5 and more	5.6	47.1	7.1	0.8	1.3

¹ Based on cooperatives reporting. Excludes strictly pooling cooperatives. Ratios were calculated by summing the individual items and dividing. The same cooperatives were included in each group to calculate all five ratios. Extreme values not representative of the group were excluded.

² Includes net income before any income taxes are deducted. Calculated by dividing net income by total assets. Usually referred to as the return on assets.

³ Net worth, or member equity, is the book value of the assets owned by members. The ratio was calculated by dividing total net worth by total assets.

⁴ Total sales includes service receipts, other income, and patronage refunds received from other cooperatives, and CoBank. The return on sales was found by dividing net income by total sales.

⁵ Calculated by dividing total sales by total assets.

⁶ The current ratio was derived by dividing current assets by current liabilities. These data were taken from annual reports where provided.

⁷ Includes bargaining cooperatives.

⁸ Excludes cottonseed.

⁹ Includes cooperatives providing primarily services related to storage, transportation, livestock shipping, and rice drying.

\$11.1 million in 1999. Crop protectant sales growth was fairly steady, increasing almost 11 percent per year from 1991 to 1999.

An analysis of local cooperative crop protectant operations showed the following:

- Herbicides comprised 81 percent of all crop protectant sales, insecticides 14 percent, fungicides 3 percent, and all other 2 percent.
- Most locals purchased their crop protectants from regional cooperatives. Regionals provided nearly 68 percent of herbicides and insecticides, and almost 50 percent of fungicides and all other crop protectants sold by locals.
- Investor-owned crop protectant suppliers were the primary competitors. Other cooperatives were a close second. Price was, most often, the major competitive factor.
- More than 95 percent of the cooperatives provided crop protectant applications, 93 percent crop/agronomy specialists, 83 percent soil testing for organic matter, and 76 percent crop protectant records. Services offered varied by

cooperative size. Larger cooperatives with higher sales volumes offered services most often.

- Cooperatives embraced technology--global positioning system (GPS) and global information system (GIS)--in applying crop protectants. Sixty-eight percent offered field mapping using this technology. GPS and GIS were also used for record keeping by cooperatives with 48 percent of the crop protectant volume and by those with 57 percent of the application equipment.

III—COOPERATIVE TRENDS, 1990-99

Although the number of cooperatives decreased during the past decade, their business volume increased, until recent years. Cooperatives continue to adjust to the changing economic environment through dissolution, merger, consolidation, acquisition, and the sale of assets. In some cases, farmers organized new-generation cooperatives and formed joint ventures and alliances to become involved in value-added activities.

In 1990, the net business volume of 4,663 cooperatives totaled \$77.3 billion. A decade later, net business volume, generated by 3,466 cooperatives, was \$99.1 billion.

Number of Cooperatives

The total number of marketing, farm supply, and related-service cooperatives declined from 4,663 in 1990 to 3,466 in 1999 (table 14 and figure 12).

Table 14— Number of farmer cooperatives, 1990–99

Period ¹	Marketing	Farm supply	Service	Total
	Number			
1990	2,519	1,717	427	4,663
1991	2,384	1,689	421	4,494
1992	2,218	1,618	479	4,315
1993	2,214	1,547	483	4,244
1994	2,173	1,496	505	4,174
1995	2,074	1,458	474	4,006
1996	2,012	1,403	469	3,884
1997	1,941	1,386	464	3,791
1998	1,863	1,347	441	3,651
1999	1,749	1,313	404	3,466

¹ Prior to 1990, see *Cooperative Historical Statistics*, CIR 1, Section 26, USDA, Revised April 1998.

Marketing cooperatives declined from 2,519 to 1,749 and farm supply cooperatives from 1,717 to 1,313. Number of service cooperatives decreased from 427 to 404.

From 1990 through 1999, 1,861 cooperatives (about 186 per year), were removed from RBS' list of farmer cooperatives. Of those, 44.6 percent were dissolved, 32.2 percent merged or consolidated, 13.9 percent were acquired by other cooperatives or investor-owned firms, and the remaining 9.2 percent were removed for other reasons (figure 13).

Even while cooperatives were disappearing from RBS' list, newly formed ones or ones not previously on the list were added. From 1990 through 1999, 528 cooperatives, (about 53 per year) were added. Only 8 cooperatives were added during 1999, the smallest increase since the information was recorded.

Grain and Farm Supply Branches

In 1995, 2,548 grain and farm supply cooperatives had an estimated 5,101 branches, 2,172 owned by grain cooperatives and 2,929 by farm supply cooperatives. In 1999, grain and farm supply cooperative numbers had dropped to 2,209, but branches had increased to 5,330 (table 15 and figure 14).

Figure 12— Farmer Cooperatives in the United States, 1990-99

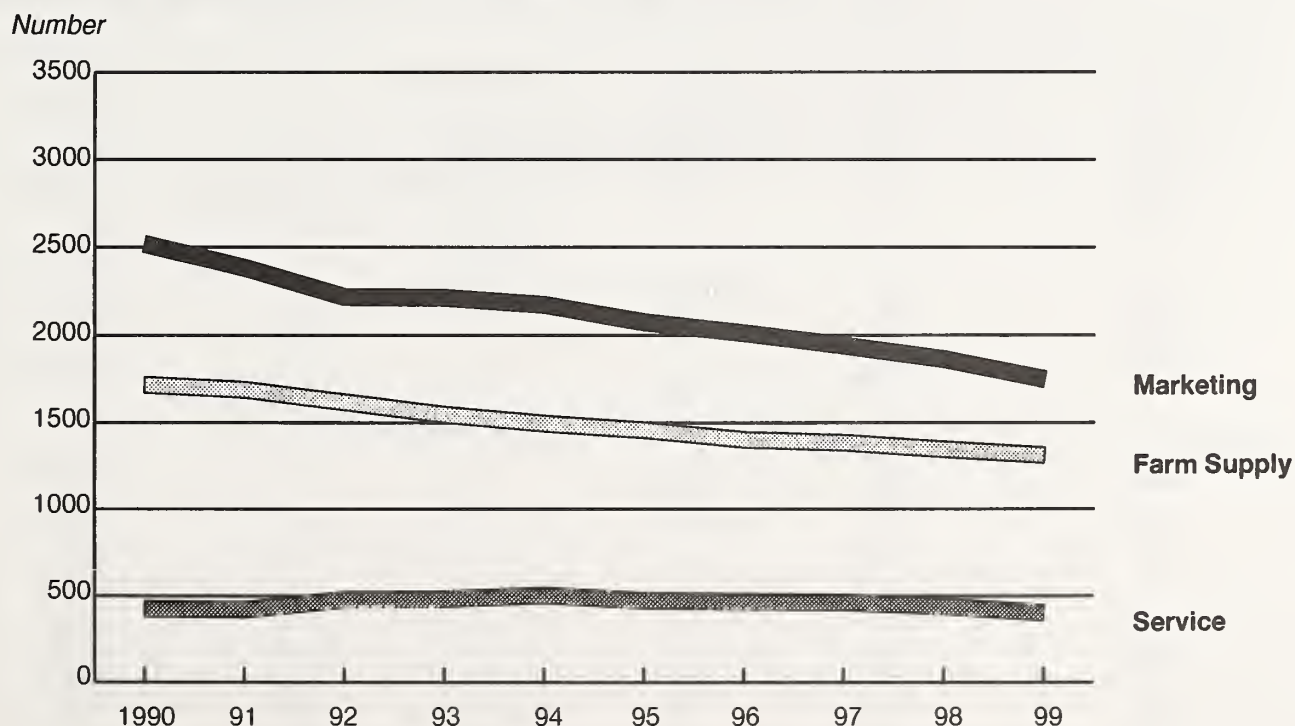
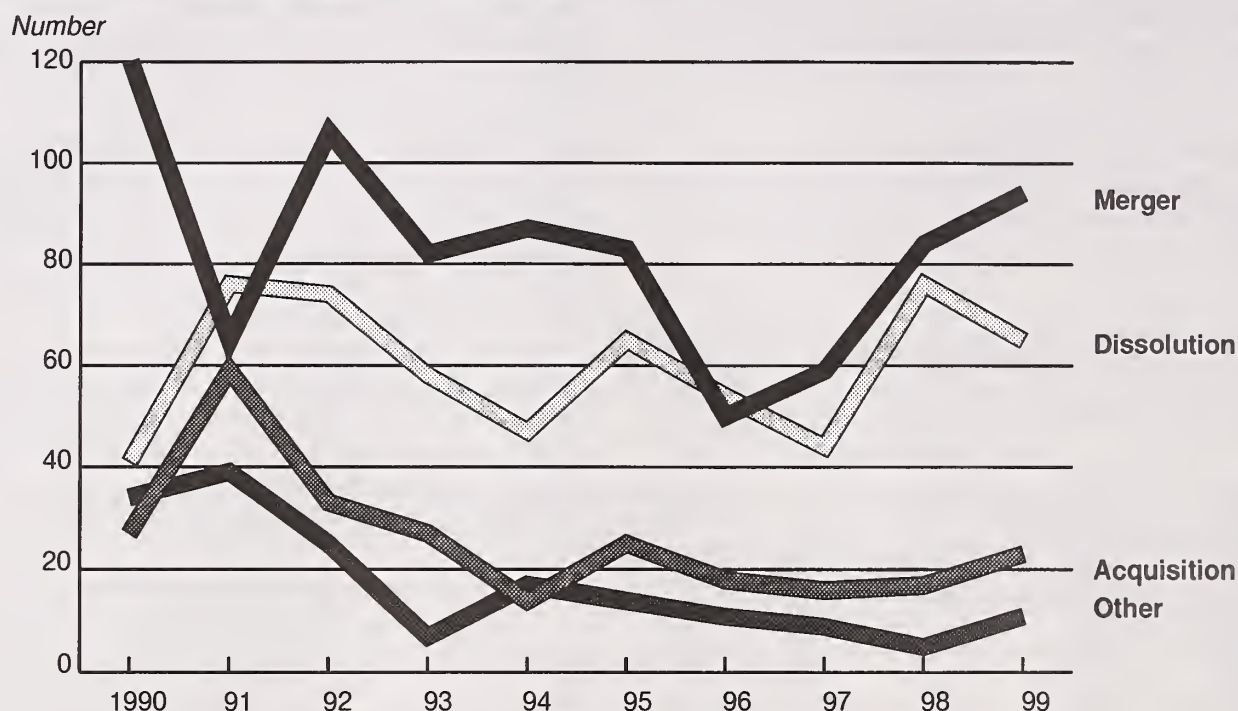


Figure 13— Cooperatives Removed from RBS' List, 1990-99



Based on a list of U.S. farmer cooperatives maintained by RBS. Mergers also include consolidations. Other includes cooperatives dropped due to inactivity and unknown and miscellaneous reasons.

Table 15— Estimated number of branches operated by grain and farm supply cooperatives, 1995-99

Year	Asset Group (million dollars)				Total
	Less than 5	5 - 9.9	10 - 24.9	25 or more	
			<i>Grain Cooperatives</i>		
1995	658	223	174	35	1,090
1996	618	229	176	43	1,066
1997	616	196	155	47	1,014
1998	550	216	150	48	964
1999	512	187	147	50	896
			<i>Branches</i>		
1995	399	440	756	577	2,172
1996	387	505	743	691	2,326
1997	364	463	717	706	2,250
1998	292	517	774	716	2,299
1999	295	422	685	761	2,163
			<i>Farm Supply Cooperatives</i>		
1995	1,134	211	97	16	1,458
1996	1,064	213	109	17	1,403
1997	1,022	232	109	23	1,386
1998	928	277	112	30	1,347
1999	933	223	121	36	1,313
			<i>Branches</i>		
1995	571	502	460	1,396	2,929
1996	542	523	526	1,438	3,029
1997	481	579	576	1,576	3,183
1998	528	548	570	1,672	3,318
1999	423	547	534	1,663	3,167

Average number of branches per cooperative was 2 in 1995 and 2.4 in 1999. Larger cooperatives accounted for most of the branches, particularly among the farm supply cooperatives. Of those with assets of \$25 million or more in 1999, 36 farm supply cooperatives had an estimated 1,663 branches and 50 grain cooperatives had 761 branches.

Memberships

Memberships in farmer cooperatives dropped from 4.1 million in 1990 to 3.2 million in 1999 (table 16 and figure 15). The long-term decline, in large part, reflects the decreasing number of farms and farmers in the United States. Many farmers are members of more than one cooperative and each membership is counted. Consequently, number of memberships exceeds the number of farmers. Duplication in membership cannot be eliminated with current reporting methods.

Member classification depends on the type of cooperative used and may not be related to the member's product(s) marketed or supplies purchased. For example, a member may market only one of the farm products handled by the cooperative or use a cooperative classified in the marketing group to purchase one or more production items. A member's business with the cooperative, therefore, may not be in the group

Table 16— **Memberships in marketing, farm supply, and related-service cooperatives, 1990–99**

Period ¹	Marketing	Farm supply	Service	Total
	1,000			
1990	1,882	2,006	232	4,119
1991	1,842	2,025	191	4,059
1992	1,839	2,020	212	4,072
1993	1,830	1,977	216	4,023
1994	1,805	1,936	245	3,986
1995	1,712	1,846	210	3,767
1996	1,682	1,795	187	3,664
1997	1,498	1,743	183	3,424
1998	1,398	1,774	181	3,353
1999	1,283	1,731	159	3,173

¹ Prior to 1990, see *Cooperative Historical Statistics*, CIR 1, Section 26, USDA, Revised April 1998.

Figure 14— **Grain and Farm Supply Cooperatives and Branches, 1992-99**

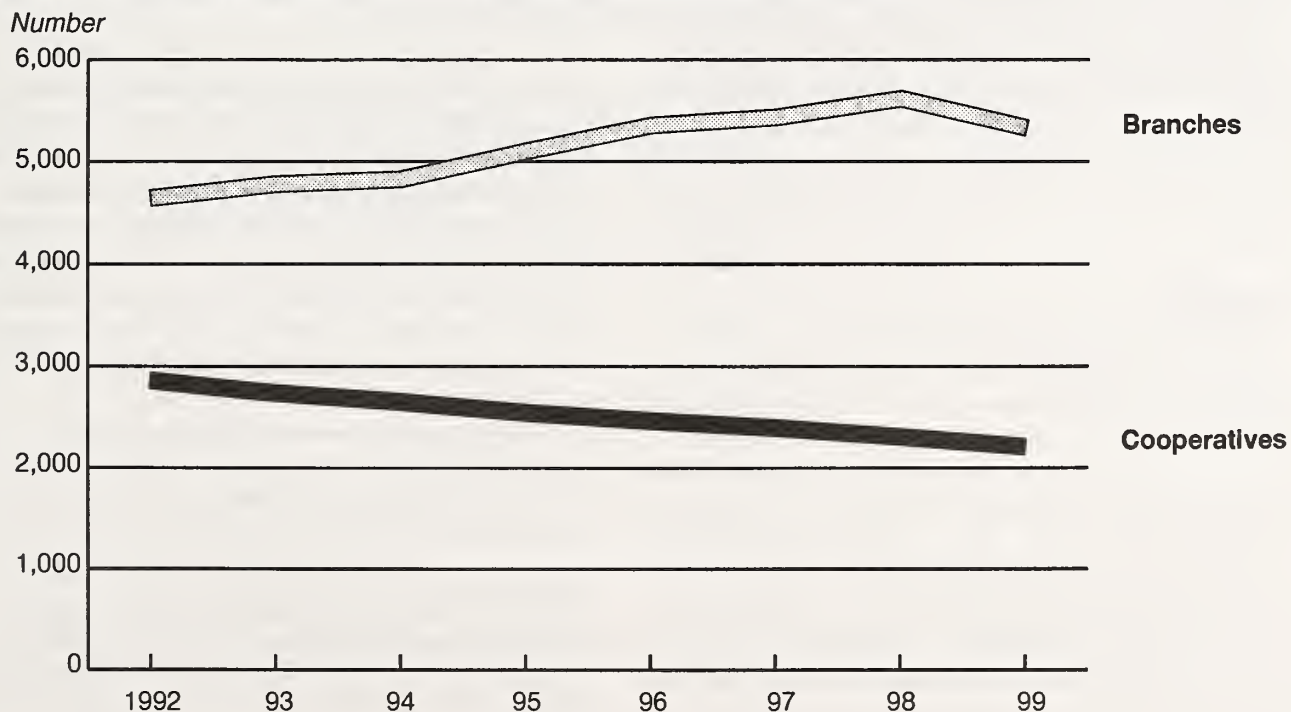
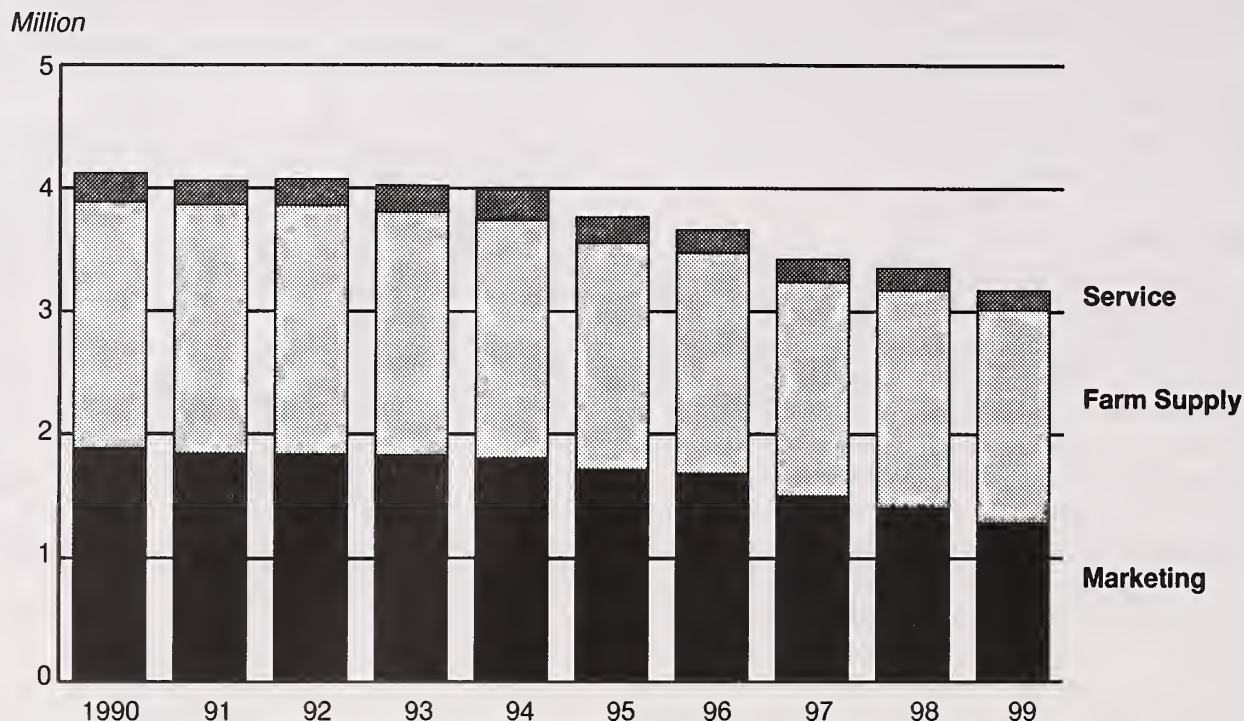


Figure 15— Cooperative Memberships by Function, 1990-99



that represents the cooperative's major business volume (the criterion for classifying cooperatives in this report). The membership, however, will be included arbitrarily in that classification.

During the past decade, memberships in related-service and marketing cooperatives decreased at more than twice the rate of memberships in farm supply cooperatives. Memberships in marketing cooperatives dropped 599,297, or 31.8 percent, while memberships in farm supply cooperatives decreased 274,160, or 13.7 percent.

Employees

Farmer cooperatives had an estimated 172,951 full-time employees in 1999, down from 173,791 in 1998 (table 17). Employees appeared to peak in 1995, at 175,399. Marketing and related-service cooperatives decreased their use of full-time employees during 1995-99. Farm supply cooperatives, however, increased their use.

Overall, the trend appears to be the same with marketing and related-service cooperatives that are decreasing their use of full-time employees while farm supply cooperatives are increasing their use. This is, in part, due to many of the grain cooperatives being

reclassified as farm supply cooperatives because of sharply declining grain prices during the past three-to-four years.

Business Volume

Net cooperative business, unadjusted for price change, increased from \$77.3 billion in 1990 to \$99.1 billion in 1999 (table 18). When adjusted³, net business totaled \$101.9 billion in 1999 (figure 16). Consequently, the difference between actual and real net business volume in 1999 was \$2.8 billion. The real net business volume was above the actual value in 1999 due to low prices received for farm products. Prices received for all farm commodities dropped nearly 5 percent, while prices paid for production items decreased .9 percent from 1998-99.

Marketing sales of four major commodity groups--dairy; grains and oilseeds, excluding cottonseed; fruits and vegetables; and livestock--decreased

³ Marketing sales was deflated by the index of producer prices received for "all farm products" (1990 = 100). Supply sales and service receipts and other income were deflated by the index of prices paid by farmers for "production items," excluding interest, taxes, and wages (1990 = 100).

Table 17—Cooperatives' number of full-time employees, 1995-99

Commodity	Full-time Employees				
	1995	1996	1997	1998	1999
			<i>Number</i>		
Cotton	2,136	1,787	1,995	1,844	1,787
Dairy	29,828	27,621	28,323	27,056	24,598
Fruits & vegetables	24,944	26,456	22,847	23,734	23,329
Grains & oilseeds	24,811	25,981	23,538	23,873	20,998
Livestock & poultry	28,635	28,453	26,399	28,031	32,690
Rice	2,785	2,636	2,713	2,655	2,600
Sugar	3,422	3,482	3,473	4,402	4,459
Other products	7,590	7,109	9,191	8,474	8,525
Marketing	124,151	123,525	118,479	120,069	118,986
Farm supply	45,302	45,566	47,870	48,171	49,466
Service	5,946	5,704	5,850	5,551	4,499
Total	175,399	174,795	172,199	173,791	172,951

slightly as a proportion of marketing sales, from 83.1 percent in 1990 to 83 percent in 1999. In 1990 and a decade later, net volume (among commodity groups) was highest for dairy. In terms of net volume, dairy was \$26 billion (\$20.7 billion in 1990) and grains and oilseeds \$17.1 billion in 1999. In 1996 and 1997, grains and oilseeds led commodity groups, due to high grain prices (figure 17).

Milk and milk product sales showed the strongest absolute dollar growth during 1990-99. Prior to 1997, grain and oilseed sales surged, but subsequently dropped, because of sharply declining prices.

In the farm supply group, petroleum, feed, and fertilizer were especially important. They accounted for 70.5 percent of cooperatives' total farm supply sales in 1990 and 67.9 percent in 1999. The drop reflected increased sales of crop protectants and "other." In 1990, they accounted for 26.2 percent of farm supply sales versus 28.8 percent in 1999.

Cooperatives' sales of petroleum, feed, fertilizer, and crop protectants grew steadily until 1998. Seed sales remained fairly stable (figure 18). In 1998 and 1999, feed and fertilizer sales dropped, due mainly to lower prices.

Net marketing of farm products totaled \$57.8 billion in 1990 and increased annually, except in 1991 and 1997-99. In 1999, net business volume of farm products marketed dropped from \$76.6 billion in 1998 to \$72 billion (table 19). Aggregate farm supply sales increased

every year, from \$17.1 billion in 1990 to \$25.2 billion in 1997, but then dropped in 1998 and 1999 to \$24.6 billion and \$23.2 billion, respectively. Service receipts (includes other income and revenue) increased from \$2.3 billion in 1990 to \$3.9 billion in 1999, the highest on record.

Gross business volume was \$92.7 billion in 1990 and \$115.3 billion in 1999, down from \$121 billion in 1998 and a record high of \$128.1 billion in 1996. The 1996 record increase in business volume (\$15.9 billion) was due mainly to higher prices for grains and oilseeds.

Net Income

Starting with \$1.44 billion in 1990, total net income fluctuated and finally set a record at \$2.36 billion in 1995. It dipped in 1996, climbed back in 1997, but then dropped significantly in both 1998 and 1999 to \$1.33 billion in 1999 (table 20 and figure 19). Low prices and margins associated with overproduction in agriculture were major factors.

Net income from own operations and other cooperatives varied over time. Both reflected better economic times in agriculture in the mid-1990s compared with conditions in the late 1980s, early 1990s, and the late 1990s. In 1990, refunds from other cooperatives totaled \$378 million, or 26.3 percent of total net

Table 18— **Cooperatives' net business volume, 1990 and 1999¹**

Function	Net Business Volume	
	1990	1999
<i>Million dollars</i>		
Products marketed:		
Beans and peas (dry edible)	213.1	174.9
Cotton	2,087.5	2,083.4
Dairy	20,719.1	25,999.1
Fruits and vegetables	8,241.4	9,285.6
Grains and oilseeds ²	14,259.2	17,113.1
Livestock	4,861.4	7,318.9
Nuts	800.8	899.1
Poultry	1,130.4	2,225.9
Rice	733.1	911.7
Sugar	2,124.4	2,540.0
Tobacco	597.0	278.4
Wool and mohair	19.8	6.4
Other products ³	2,043.4	3,145.5
Total farm products	57,830.6	71,981.9
Supplies purchased:		
Crop protectants.	1,767.9	3,018.3
Feed.	4,102.9	4,725.6
Fertilizer	3,230.4	4,758.6
Petroleum	4,715.2	6,259.8
Seed	562.0	752.1
Other supplies	2,710.2	3,662.9
Total farm supplies	17,088.4	23,177.3
Services provided:		
Services provided:		
Trucking, cotton ginning, storage, grinding, locker plants, misc.	2,347.3	3,905.1
Total business	77,266.4	99,064.3

¹ Excludes inter-cooperative business volume. Totals may not add due to rounding.

² Excludes cottonseed. Cottonseed sales were included with cotton. Cottonseed meal and oil sales were included with feed and other products, respectively.

³ Includes value of processed oilseeds.

income. In 1999, refunds totaled \$383.5 million, or 28.9 percent of total net income. CoBank refunds were also included.

Balance Sheet

Cooperatives' total assets grew by \$17.7 billion, from \$30 billion in 1990 to \$47.7 billion in 1999 (table 21 and figure 20), reflecting added investments in their own operations and investments in other cooperatives. In 1990, nearly \$3.1 billion (10.3 percent of total assets)

was invested in other cooperatives, including CoBank. In 1999, these investments were \$5.4 billion, up \$2.3 billion from 1990, or 11.2 percent of total assets.

Cooperatives' total liabilities also grew, from \$16.6 billion in 1990 (55.2 percent) to \$27.4 billion, up \$10.8 billion in 10 years.

Total liabilities financed 57.5 percent of total assets in 1999. The strength of a balance sheet depends on the proportion of total assets financed by net worth or equity capital. In 1990, cooperatives' net worth totaled \$13.4 billion and financed 44.8 percent of total assets. By 1999, total net worth had reached nearly \$20.3 billion, and financed 42.5 percent. During the decade, the proportion of net worth used to finance total assets reached a high of 44.9 percent in 1991 and a low of 40.8 percent in 1996. Most would say farmer cooperatives, overall, have a strong balance sheet.

IV—OTHER SERVICE COOPERATIVES

In 1999, other service cooperatives, ones other than those directly related to marketing and purchasing, included farm credit system cooperatives, rural electric cooperatives, rural credit unions, and dairy herd improvement associations.

Farm Credit System

The Farm Credit System (FCS) is a nationwide network of financial cooperatives that lend to agriculture and rural America. FCS provides credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives, rural utilities, and to certain foreign or domestic entities in connection with international transactions.

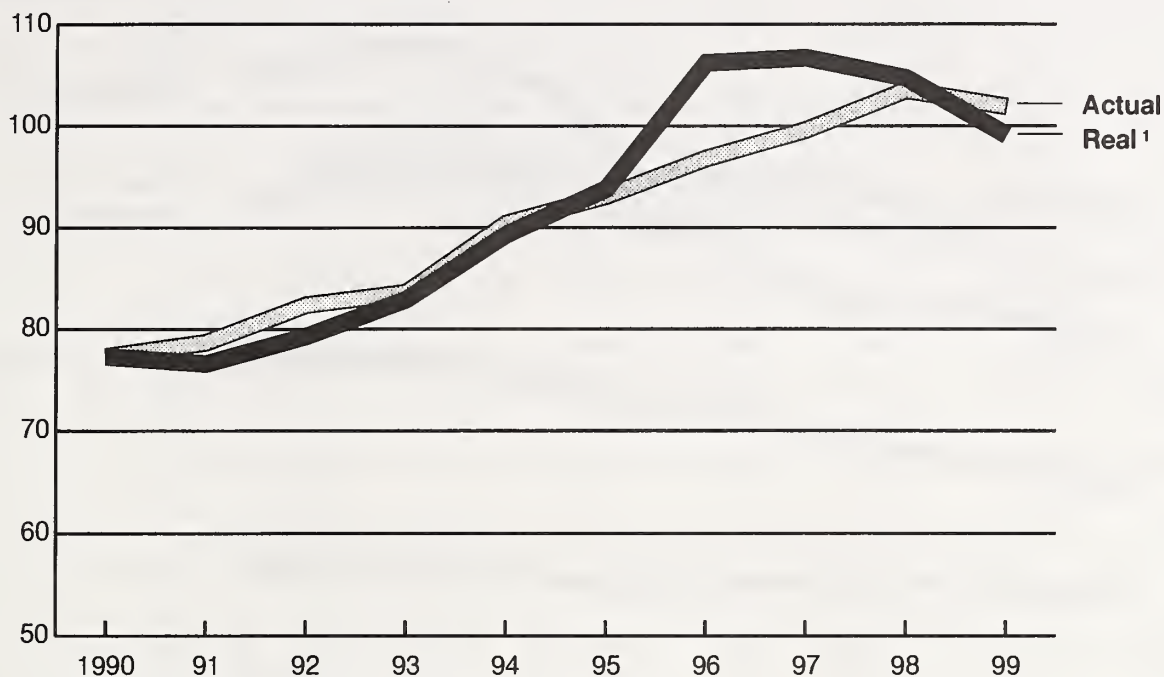
By 1999, FCS was represented by 18 Federal Land Bank Associations (FLBAs), 50 Federal Land Credit Associations (FLCAs), 60 Production Credit Associations (PCAs), and 50 Agricultural Credit Associations (ACAs) (table 22).

The combined assets of FCS for 1999 totaled \$88.7 billion--up 5.4 percent from \$84.1 billion in 1998 (table 23). Net worth was \$13.3 billion, up 6.4 percent from 1998, and net income was \$1.23 billion, down from \$1.25 billion, or 1.4 percent.

The FLBAs originate and service long-term loans made by FCBs. Loan proceeds are used to purchase agricultural real estate and rural homes and refinance agricultural real estate and rural home mortgages.

Figure 16— Cooperatives' Net Business Volume, 1990-99

Billion dollars



¹ Actual sales were adjusted for price change based on 1990 = 100.

Figure 17— Cooperatives' Net Sales of Selected Commodities, 1990-99

Billion dollars

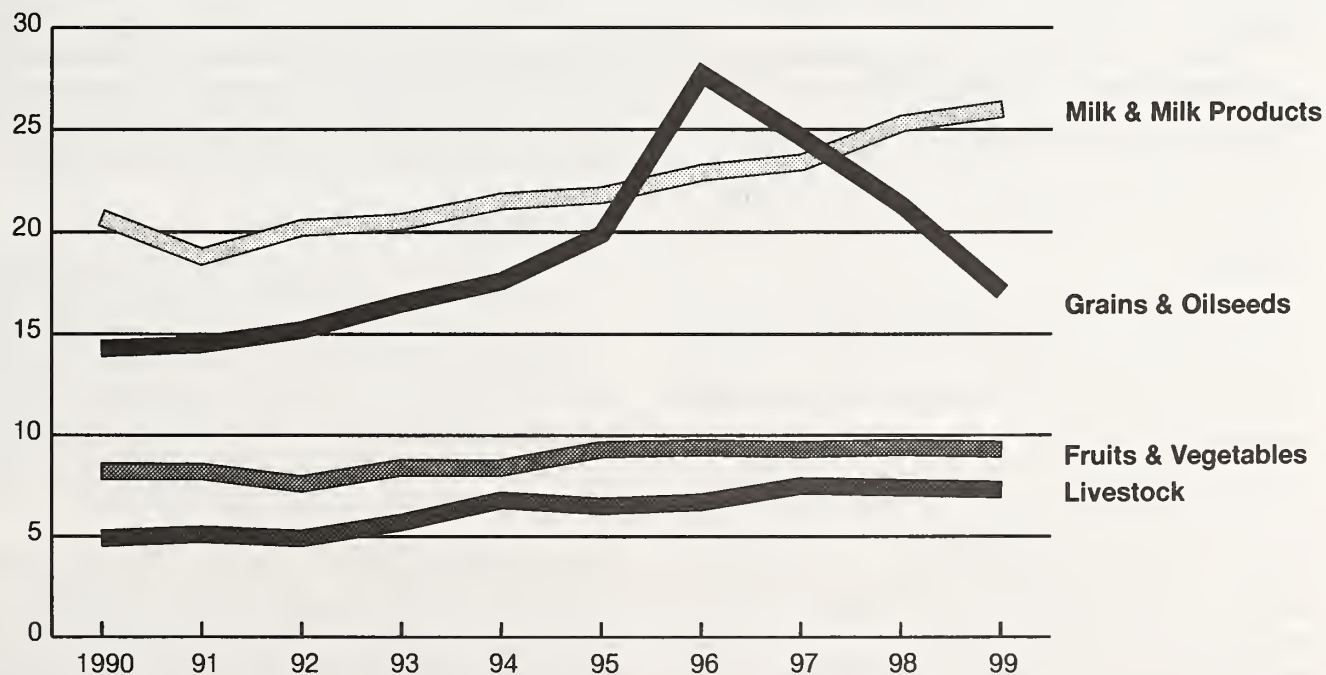
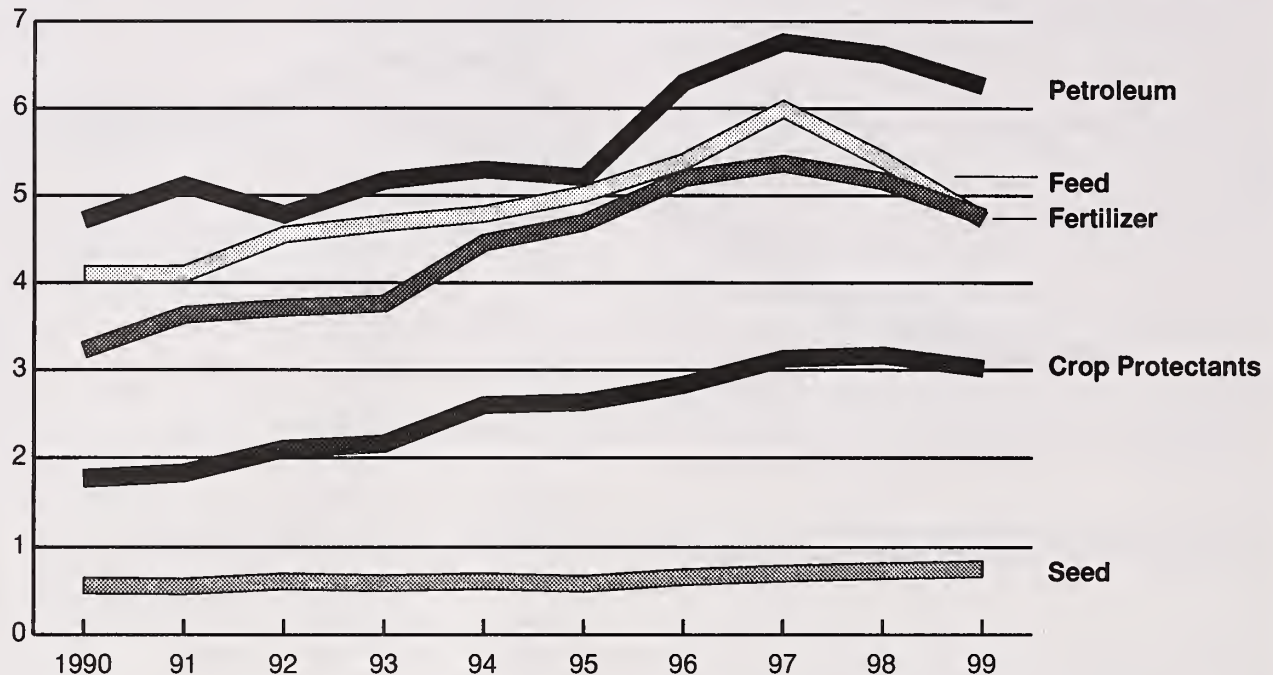


Figure 18— Cooperatives' Net Sales of Selected Farm Supplies, 1990-99

Billion dollars



Of the 50 FLCAs operating on Oct. 1, 1999, 18 were in the FCB of Wichita and 17 in the AgriBank, FCB, District. FLCAs were authorized by the Agricultural Credit Act of 1987. FLCAs are former FLBAs that were given direct-lending authority by FCBs.

PCAs provide farmers and ranchers short- and intermediate-term loans for various purposes, such as operating expenses, farm equipment and livestock purchases, and farm buildings and other capital improvements. Of the 60 PCAs, 17 were located in the AgriBank, FCB, District and 18 in the FCB of Wichita territory.

ACAs resulted from the merger of FLBAs or FLCAs with PCAs. ACAs offer both long- and short-term loans. Of the 50 ACAs operating on Oct. 1, 1999, 32 of them were in AgFirst, FCB, territory and 8 in the AgriBank, FCB, district.

The FCBs provide loans and support services to FLBAs, ACAs, FLCAs, and PCAs within their districts.

CoBank, ACB, provides short-, intermediate-, and long-term credit to agricultural cooperatives, rural utility systems, and other rural businesses nationwide. It also provides credit to the Farm Credit Associations serving agricultural producers in the Northeast. CoBank, ACB, is owned by about 2,300 stockholders,

consisting of U.S. farmer cooperatives, rural utilities, ACAs, and other businesses serving rural America. CoBank also finances U.S. agricultural exports and provides international banking services for farmer cooperatives.

The combined assets of CoBank increased from \$22.1 billion in 1998 to \$24.1 billion in 1999. Net worth totaled nearly \$1.7 billion. As of Dec. 31, 1999, CoBank had net loans of \$18.4 billion and net income of \$121 million, down from \$145 million in 1998 (table 24).

Rural Electric Cooperatives

Rural electric cooperatives increased in number to 672 from 662 in 1998. Consumer members, however, decreased to 10.5 million from 10.8 million, but revenue increased to \$23.7 billion (table 25) from \$14.2 billion in 1998. Texas had the most associations, with 44 (6.6 percent of the total), while Georgia had the most consumer members, with 1,069 (10.2 percent), and the largest revenue, \$2,744 million (11.6 percent).

Rural Credit Unions

The 595 rural credit unions reported 3.9 million members and savings of more than \$18 billion, a decrease from 653 credit unions, 4.4 million members, and savings of \$19.9 billion in 1998. Wisconsin, with

Table 19— **Cooperatives' gross and net business volumes, 1990–99¹**

Period ²	Gross volume				Net volume			
	Farm products	Farm supplies	Services ³	Total	Farm products	Farm supplies	Services ³	Total
<i>Billion dollars</i>								
1990	64.1	26.3	2.3	92.7	57.8	17.1	2.3	77.3
1991	61.4	26.8	2.5	90.8	56.2	17.9	2.5	76.6
1992	63.8	27.0	2.6	93.4	58.2	18.5	2.6	79.3
1993	66.8	28.2	2.7	97.7	60.9	19.2	2.7	82.9
1994	72.1	30.4	3.0	105.5	65.5	20.8	3.0	89.3
1995	77.9	31.0	3.3	112.2	69.3	21.2	3.3	93.8
1996	90.3	34.7	3.1	128.1	79.4	23.7	3.1	106.2
1997	85.9	37.1	3.6	126.7	77.8	25.2	3.6	106.7
1998	84.5	33.0	3.5	121.0	76.6	24.6	3.5	104.7
1999	80.5	30.9	3.9	115.3	72.0	23.2	3.9	99.1
<i>Percent</i>								
1990	69.1	28.4	2.5	100	74.9	22.1	3.0	100
1991	67.7	29.5	2.8	100	73.3	23.4	3.3	100
1992	68.3	28.9	2.8	100	73.4	23.4	3.2	100
1993	68.4	28.8	2.8	100	73.5	23.2	3.3	100
1994	68.4	28.8	2.8	100	73.4	23.3	3.3	100
1995	69.5	27.6	2.9	100	73.9	22.6	3.5	100
1996	70.5	27.1	2.4	100	74.8	22.3	2.9	100
1997	67.8	29.3	2.9	100	72.9	23.7	3.4	100
1998	69.9	27.2	2.9	100	73.2	23.5	3.3	100
1999	69.8	26.8	3.4	100	72.7	23.4	3.9	100

¹ Gross includes and net excludes inter-cooperative business. Totals may not add due to rounding.

² Prior to 1990, see *Cooperative Historical Statistics*, CIR 1, Section 26, USDA, Revised April 1998. Data for prior years are not entirely comparable due to revisions in statistical procedures.

³ Services related to marketing or supply purchasing, but not included in the volumes reported for these activities. Beginning with 1990, other income and revenue were included with service receipts.

65, had the most associations, or 10.9 percent of the total, while California had the most members and credit union savings with 902,000 and \$5.2 billion, respectively. California, Wisconsin, and Michigan accounted for more than 1.9 million memberships (48.6 percent of the total), and more than \$9 billion in savings, or 50.1 percent of the total (table 26).

New York (2,940), combined, accounted for 59.6 percent of total members, the same as in 1998. About 872,700 (20.4 percent) of the cows tested were in California, up from 19.7 percent.

Dairy Herd Improvement Associations

Dairy Herd Improvement Associations (DHIA) had 33,539 memberships in 1999 (table 27), down from 34,820 in 1998. The DHIAs tested nearly 4.3 million cows in 1999, up from 4.2 million in 1998. Wisconsin (8,512), Pennsylvania (4,730), Minnesota (3,792), and

Table 20— **Net income of farmer cooperatives, 1990–99¹**

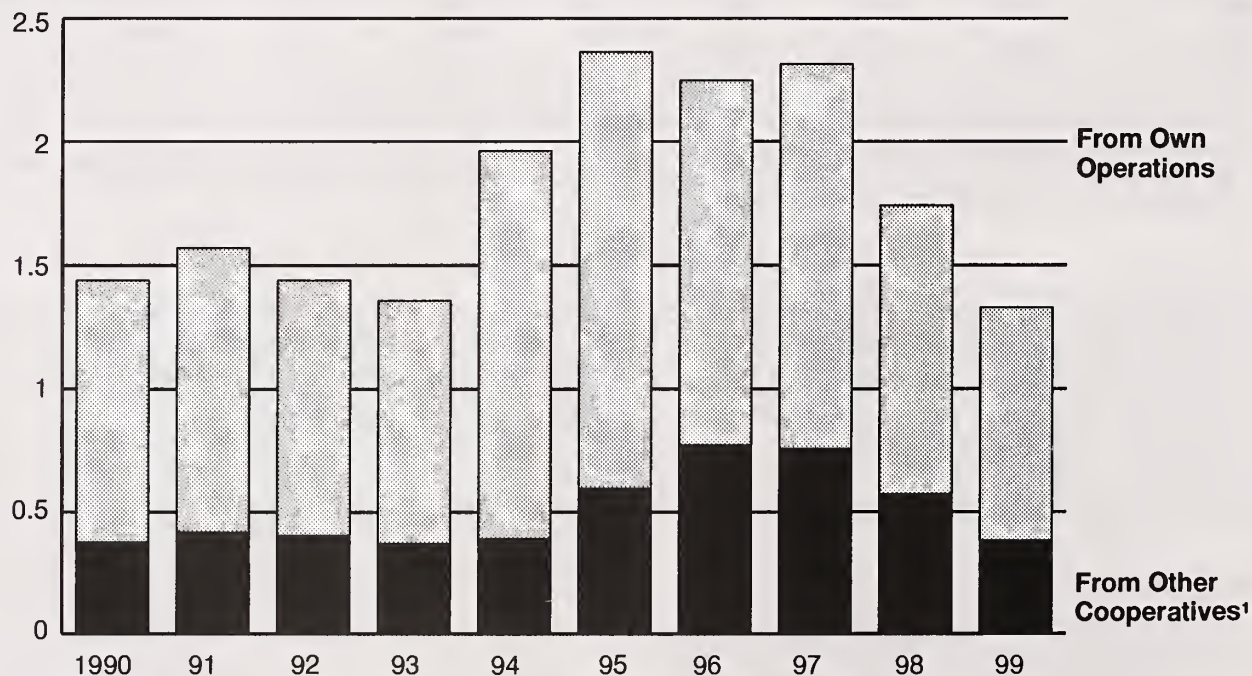
Year	From own operations	From other cooperatives ²	Total
<i>Million dollars</i>			
1990	1,062	378	1,440
1991	1,152	418	1,570
1992	1,034	406	1,440
1993	985	373	1,358
1994	1,571	392	1,963
1995	1,766	597	2,363
1996	1,475	773	2,248
1997	1,557	757	2,314
1998	1,169	573	1,742
1999	944	384	1,328

¹ Totals may not add due to rounding. Excludes income from cooperative pooling operations.

² Dividends and patronage refunds received from other marketing, farm supply, and related-service cooperatives, CoBank, and Banks for Cooperatives, where applicable.

Figure 19— **Cooperatives' Net Income, 1990-99**

Billion dollars



¹ Includes dividends and patronage refunds from other farmer cooperatives and CoBank.

Table 21— **Combined balance sheet data for farmer cooperatives, 1990–99**

Year	Assets from own operations	Investments in other co-ops ¹	Total assets	Total liabilities	Net worth
<i>Million dollars</i>					
1990	26,948	3,076	30,024	16,575	13,449
1991	27,887	3,381	31,268	17,227	14,040
1992	28,967	3,027	31,994	17,780	14,213
1993	30,484	2,962	33,446	18,634	14,812
1994	32,784	3,176	35,960	20,339	15,621
1995	37,046	3,228	40,274	23,643	16,631
1996	39,011	3,577	42,588	25,195	17,392
1997	39,922	4,074	43,996	25,459	18,537
1998	41,884	4,676	46,560	26,606	19,954
1999	42,330	5,352	47,682	27,418	20,264
<i>Percent of total assets</i>					
1990	89.8	10.2	100	55.2	44.8
1991	89.2	10.8	100	55.1	44.9
1992	90.5	9.5	100	55.6	44.4
1993	91.1	8.9	100	55.7	44.3
1994	91.2	8.8	100	56.6	43.4
1995	92.0	8.0	100	58.7	41.3
1996	91.6	8.4	100	59.2	40.8
1997	90.7	9.3	100	57.9	42.1
1998	90.0	10.0	100	57.1	42.9
1999	88.8	11.2	100	57.5	42.5

¹ Includes investments in other farmer cooperatives, CoBank, and Banks for Cooperatives, where applicable.

Figure 20— **Cooperatives' Net Worth and Liabilities, 1990-99**

Billion dollars

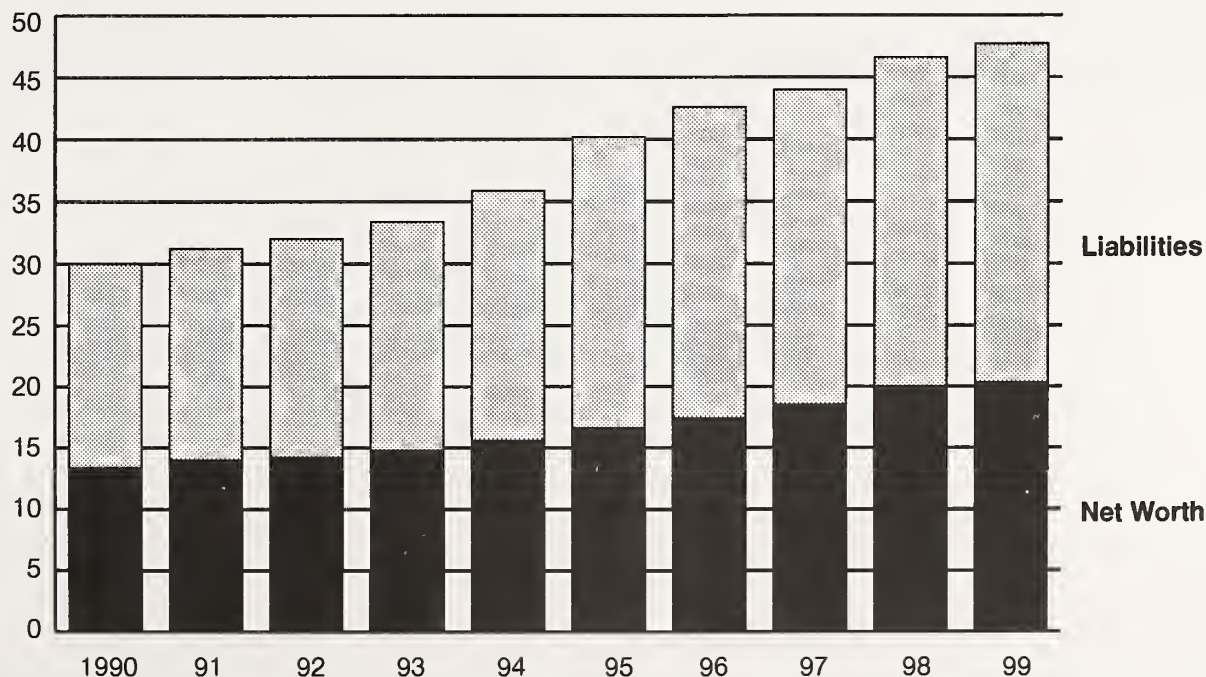


Table 22— **Farm Credit Association Structure, Oct. 1, 1999¹**

District or bank affiliation	FLBA	PCA	ACA	FLCA
<i>Number</i>				
CoBank, ACB ²	-	-	4	-
AgFirst FCB	-	1	32	-
AgriBank, FCB	-	17	8	17
FCB of Wichita	4	18	-	18
FCB of Texas	14	13	-	3
Western FCB ³	-	10	5	11
AgAmerica, FCB	-	1	1	1
	—	—	—	—
Total	18	60	50	50

- = No bank affiliation.

¹ FLBA = Federal Land Bank Association, PCA = Production Credit Association, ACA = Agricultural Credit Association, FLCA = Federal Land Credit Association.

² The St. Paul Bank for Cooperatives merged with CoBank, effective July 1, 1999.

³ 1 ACS Parent - Designates ACS that has PCA & FLCA Subsidiaries

Source: Farm Credit Administration, *Accountability Report FY 1999*, McLean, VA, p. 32.

Table 23— **Farm Credit System's combined assets, net worth, and net income, 1995–99¹**

Year	Assets	Net worth	Net income
<i>Million dollars</i>			
1995	71,438	9,864	1,165
1996	74,917	10,729	1,201
1997	78,144	11,694	1,267
1998	84,139	12,522	1,251
1999	88,692	13,319	1,233

¹ *Farm Credit System, Annual Information Statement, 1999*, Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ., Feb. 24, 2000, p. 3.

Table 24— **Combined assets, net worth, net loans, and net income of CoBank, ACB, 1995–99¹**

Year	Assets	Net worth	Net loans	Net income
<i>Million dollars</i>				
1995	21,268	1,429	17,553	167
1996	20,771	1,504	16,871	145
1997	21,207	1,600	16,821	164
1998	22,104	1,671	17,513	145
1999	24,089	1,665	18,398	121

¹ As of December 31 of each year. Effective July 1, 1999, CoBank, ACB, and the former St. Paul Bank for Cooperatives merged through an exchange of stock. Source: CoBank, ACB, *Creating Customer Value in the 21st Century, 1999 Annual Report*, Englewood, CO.

Table 25— Number, participation, and level of activity of rural electric¹ cooperatives, by State, Dec. 31, 1999²

State	Cooperatives	Members	Revenue	State	Cooperatives	Members	Revenue
	<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>		<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>
Alabama	19	395	813	Montana	23	98	128
Alaska	9	77	177	Nebraska	3	9	111
Arizona	6	125	320	New Mexico	17	181	376
Arkansas	16	291	972	New York	4	16	14
California	3	15	21	North Dakota	23	118	883
Colorado	18	293	822	Ohio	21	291	553
Florida	11	436	1,092	Oklahoma	20	271	491
Georgia	38	1,069	2,744	Oregon	8	53	79
Idaho	4	30	36	Pennsylvania	11	177	188
Illinois	8	53	135	South Carolina	21	528	1,275
Indiana	22	253	625	South Dakota	32	126	248
Iowa	31	136	395	Tennessee	21	822	1,162
Kansas	28	152	341	Texas	44	602	1,303
Kentucky	26	666	1,479	Virginia	12	365	546
Louisiana	11	293	772	Washington	5	32	49
Maine	3	14	13	Wisconsin	17	133	293
Michigan	6	101	81	Wyoming	9	58	119
Minnesota	37	394	828	Other States ³	9	918	1,822
Mississippi	15	405	896				
Missouri	41	480	1,473	United States	672	10,466	23,662

¹ Source: Rural Utilities Service, USDA.² Totals may not add due to rounding.³ Includes States with fewer than three cooperatives – Delaware, Maryland, Nevada, New Jersey, North Carolina, Utah, Vermont, and West Virginia.

Table 26— **Number, participation, and level of activity of rural credit unions¹, by State, Dec. 31, 1999²**

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>		<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>
Alabama	10	25	89	New Jersey	6	12	20
Arizona	4	18	51	New Mexico	3	48	188
Arkansas	3	8	32	New York	27	164	775
California	52	902	5,211	North Carolina	13	30	65
Colorado	14	22	80	North Dakota	29	100	602
Florida	14	108	420	Ohio	12	39	70
Georgia	10	35	97	Oklahoma	4	7	30
Hawaii	17	105	627	Oregon	9	63	239
Idaho	9	17	50	Pennsylvania	19	32	85
Illinois	11	65	284	Rhode Island	3	69	590
Indiana	16	50	411	South Carolina	3	9	58
Iowa	7	7	20	South Dakota	7	11	33
Kansas	16	75	236	Tennessee	8	15	38
Kentucky	7	31	85	Texas	32	105	375
Louisiana	8	16	43	Utah	9	15	47
Maine	8	20	83	Vermont	3	21	55
Maryland	5	59	284	Virginia	6	50	177
Massachusetts	4	16	64	Washington	13	157	719
Michigan	24	391	1,290	West Virginia	3	4	10
Minnesota	35	213	1,042	Wisconsin	65	616	2,525
Mississippi	4	14	38	Other States ³	7	31	121
Missouri	6	20	62				
Montana	10	54	208				
Nebraska	15	20	95				
Nevada	5	45	291	United States	595	3,931	18,016

¹ Source: Credit Union National Association, Inc. (Includes federally chartered and State-chartered credit unions.)

² Totals may not add due to rounding.

³ Includes States with fewer than three cooperatives—Alaska, Connecticut, Delaware, New Hampshire, and Wyoming.

Table 27— **Number, participation, and level of activity of dairy herd improvement associations,¹
by State, Dec. 31, 1999²**

State	Members (herds)	Cows tested	State	Members (herds)	Cows tested
	<i>Number</i>	<i>1,000</i>		<i>Number</i>	<i>1,000</i>
Alabama	64	11.1	Nebraska	284	34.5
Arizona	61	79.1	Nevada	21	10.2
Arkansas	85	8.2	New Hampshire	114	10.9
California	1,128	872.7	New Jersey	91	7.8
Colorado	85	40.1	New Mexico	26	38.1
Connecticut	125	14.2	New York	2,940	331.6
Delaware	31	4.1	North Carolina	252	41.5
Florida	113	69.0	North Dakota	94	8.3
Georgia	238	59.2	Ohio	1,199	106.6
Hawaii	5	2.5	Oklahoma	142	19.2
Idaho	235	83.7	Oregon	289	51.5
Illinois	697	57.6	Pennsylvania	4,730	327.0
Indiana	553	46.3	Rhode Island	7	.5
Iowa	1,421	115.2	South Carolina	88	16.8
Kansas	343	38.9	South Dakota	305	31.1
Kentucky	329	27.8	Tennessee	276	34.3
Louisiana	148	20.5	Texas	331	133.7
Maine	169	15.6	Utah	250	47.6
Maryland	439	39.8	Vermont	565	56.8
Massachusetts	132	11.6	Virginia	553	71.6
Michigan	1,060	148.8	Washington	276	75.2
Minnesota	3,792	307.4	West Virginia	69	7.7
Mississippi	81	12.5	Wisconsin	8,512	641.0
Missouri	557	49.7	Wyoming	9	1.6
Montana	58	7.5			
			United States ³	33,539	4,287.1

¹ Source: Agricultural Research Service, USDA. Totals may not add due to rounding.

² Totals may not add due to rounding.

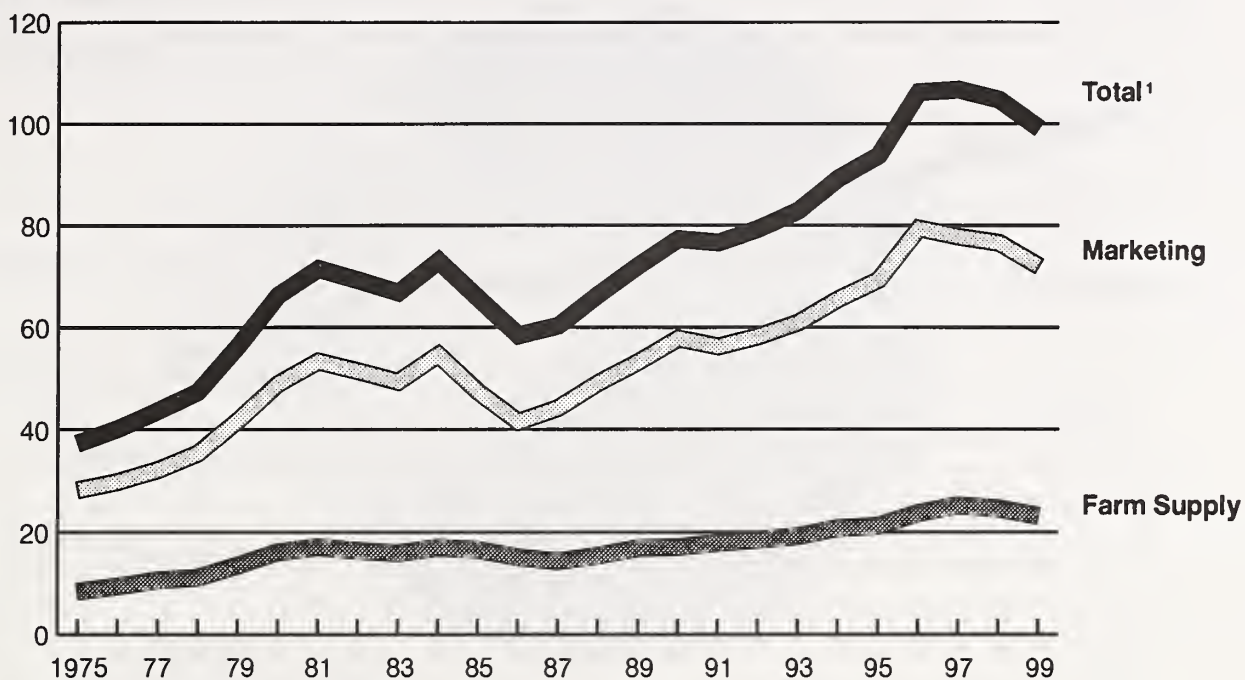
³ Fewer than 500.

⁴ Includes Alaska, Puerto Rico, and Virgin Islands with 167 members and 39,345 cows tested.

Appendix Figures

Appendix Figure 1— **Cooperatives' Net Business Volume, 1975-99**

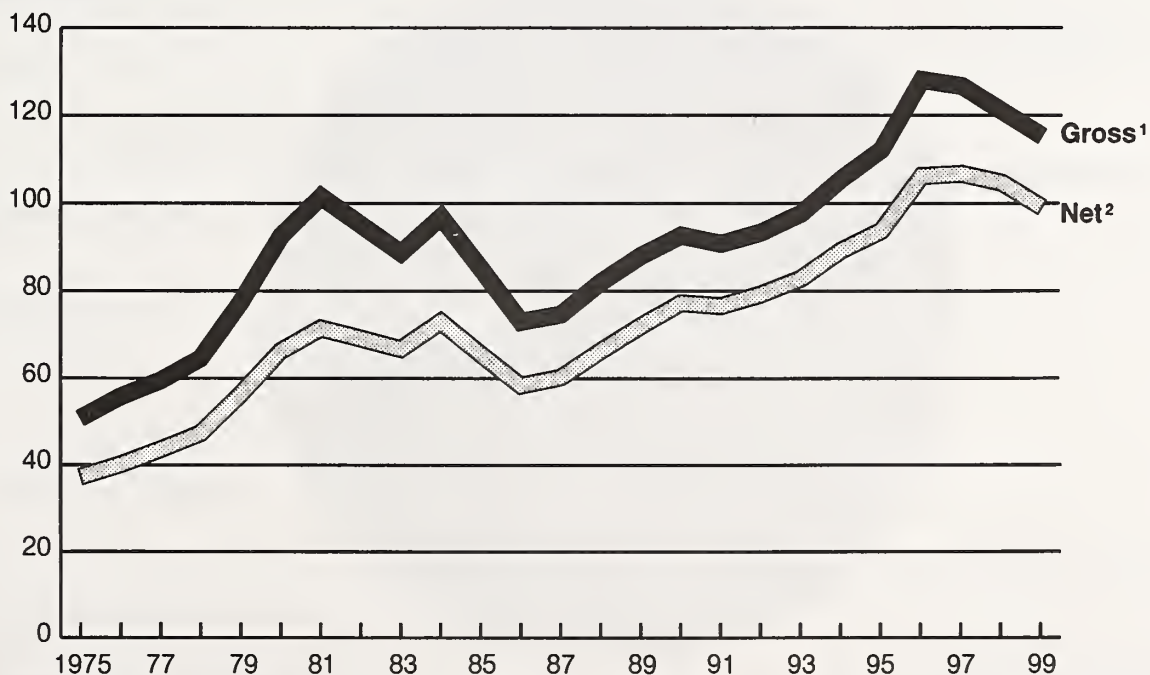
Billion dollars



¹ Total includes value of related services and other income.

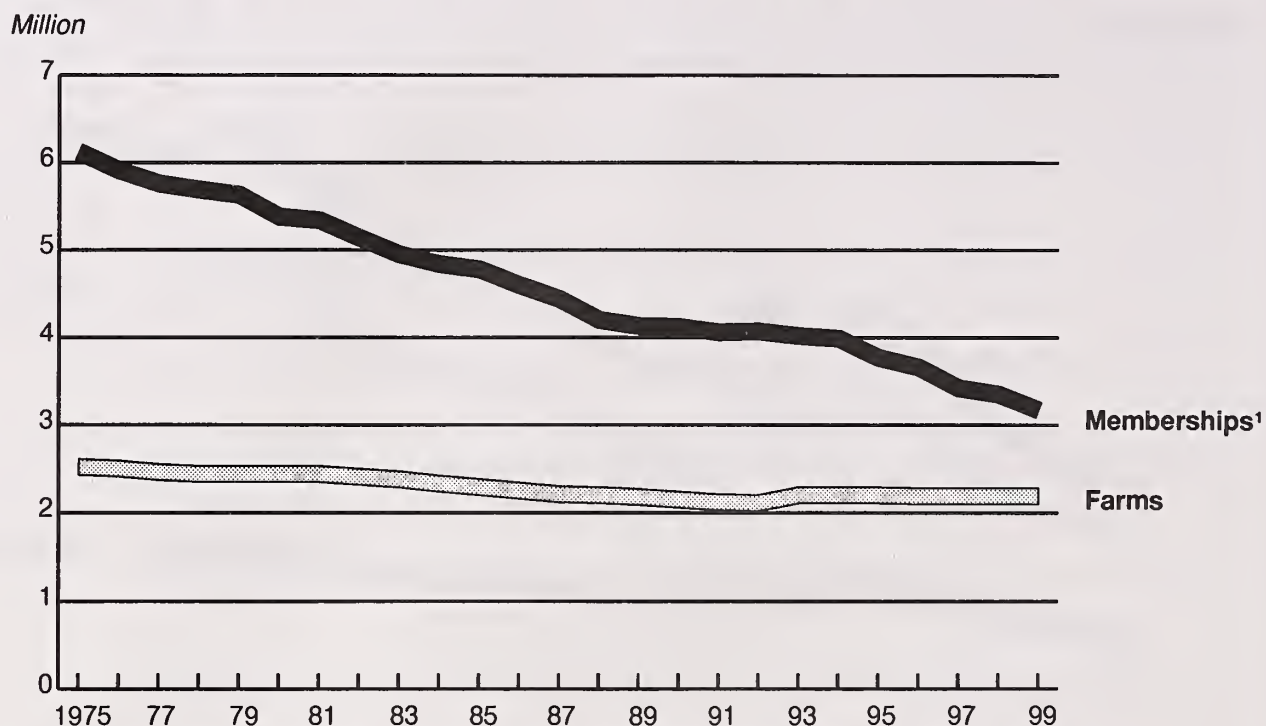
Appendix Figure 2— **Cooperatives' Gross and Net Business Volumes, 1975-99**

Billion dollars



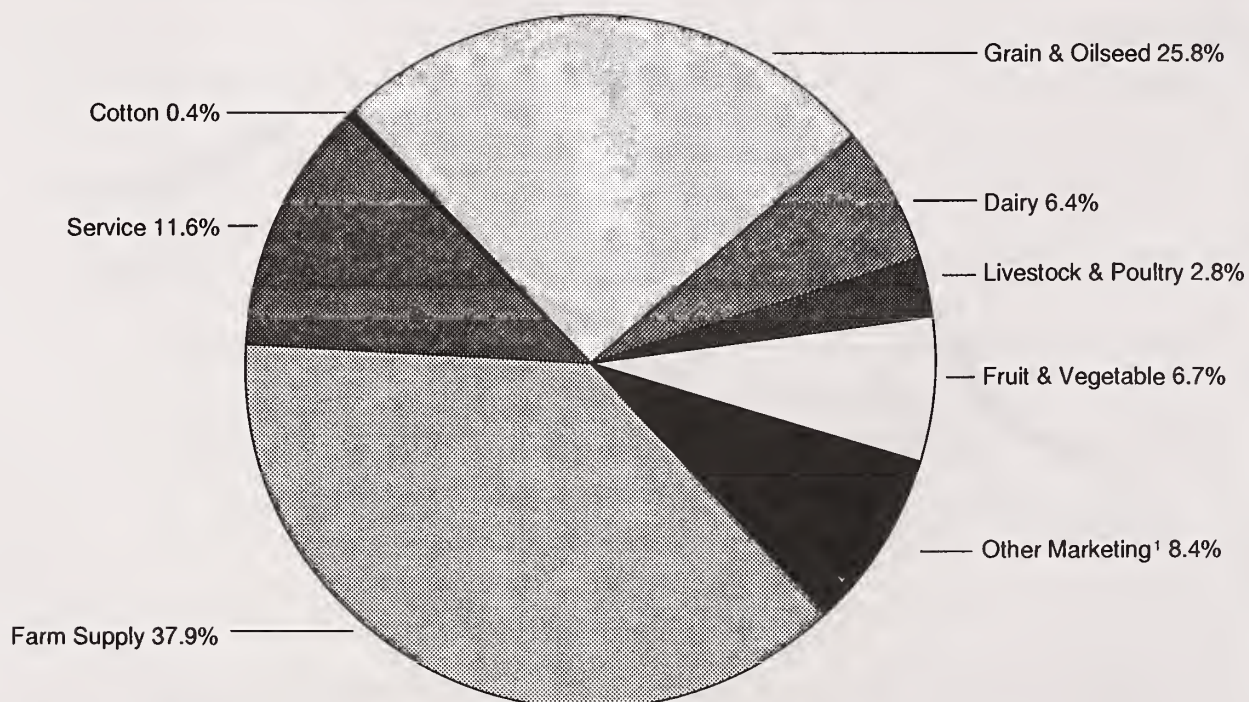
¹ Includes inter-cooperative business. ² Excludes inter-cooperative business.

Appendix Figure 3— **U.S. Farms and Farmer Cooperative Memberships, 1975-99**



¹ Memberships were higher than farm numbers because many farmers belonged to more than one cooperative.

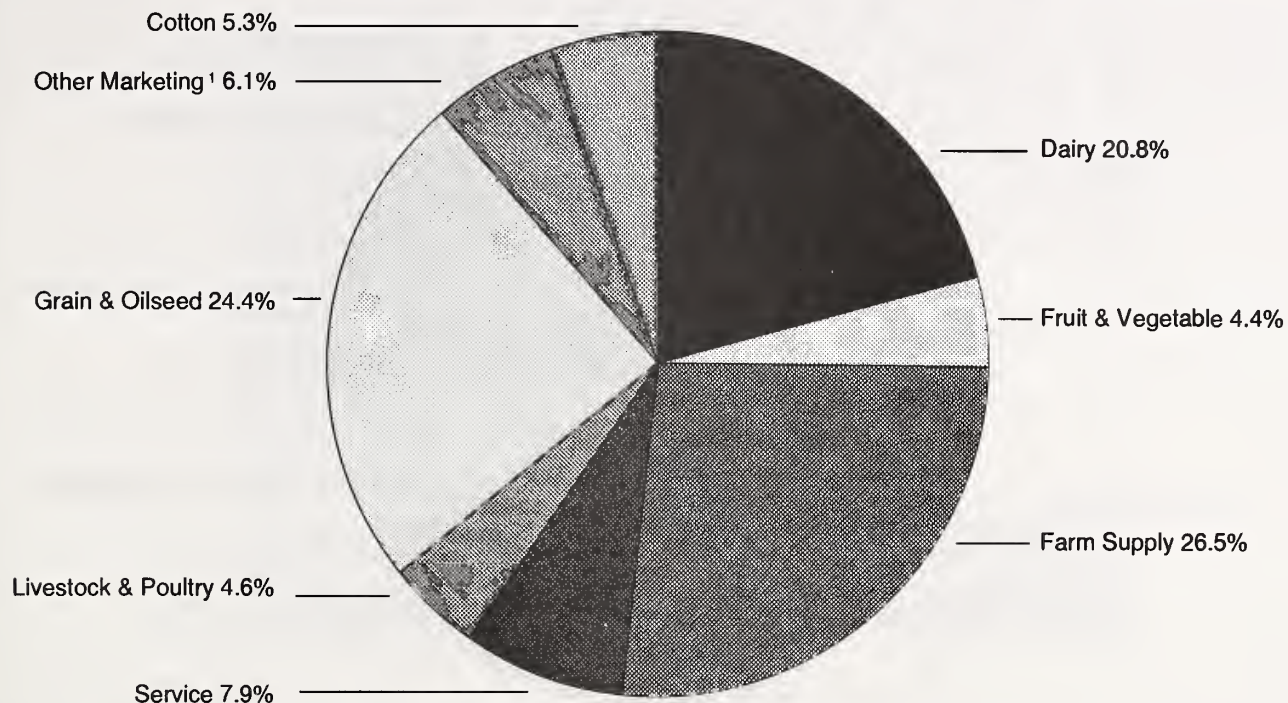
Appendix Figure 4— **Distribution of Farmer Cooperatives, by Type, 1999**



Percentage based on 3,466 cooperatives.

¹ Includes dry bean and pea, wool and mohair, nuts, rice, sugar, fishery, and other miscellaneous marketing cooperatives.

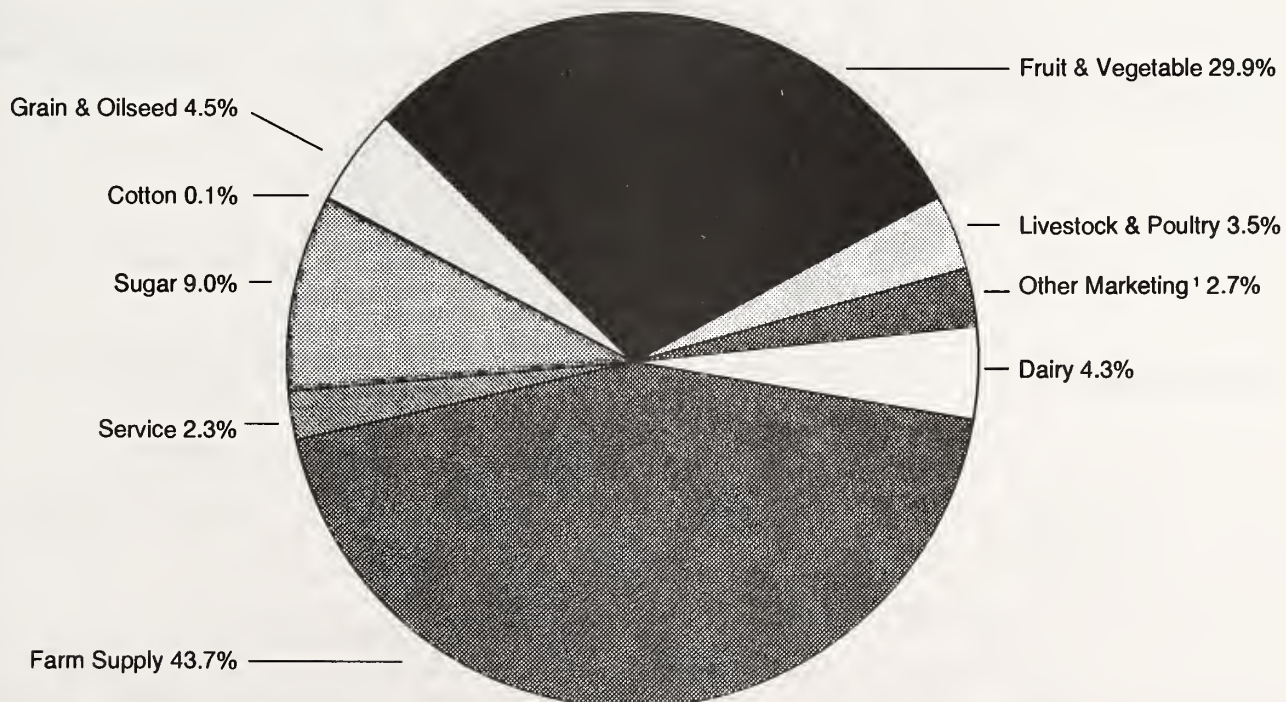
Appendix Figure 5— **Distribution of Total Net Income, by Type of Cooperative, 1999**



Percentage based on net income of \$1.3 billion.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, rice, sugar, fishery, and other miscellaneous marketing cooperatives.

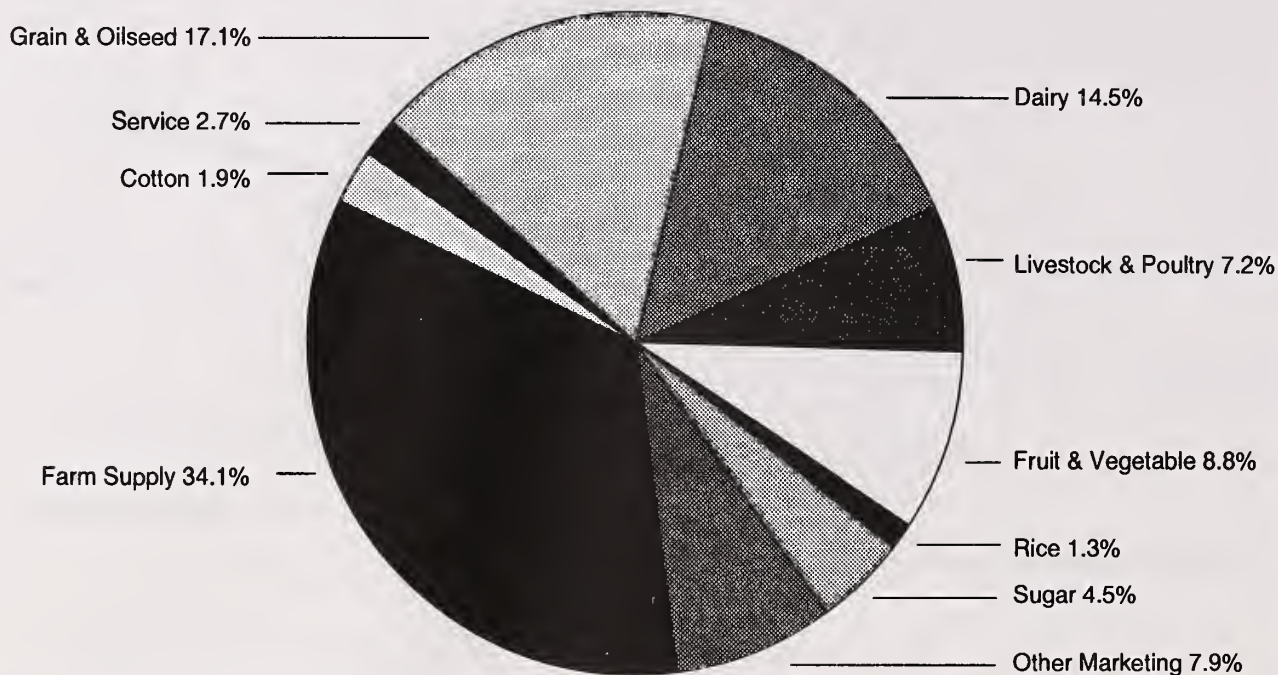
Appendix Figure 6— **Distribution of Total Losses, by Type of Cooperative, 1999**



Percentage based on losses of \$284.1 million.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, rice, fishery, and other miscellaneous marketing cooperatives.

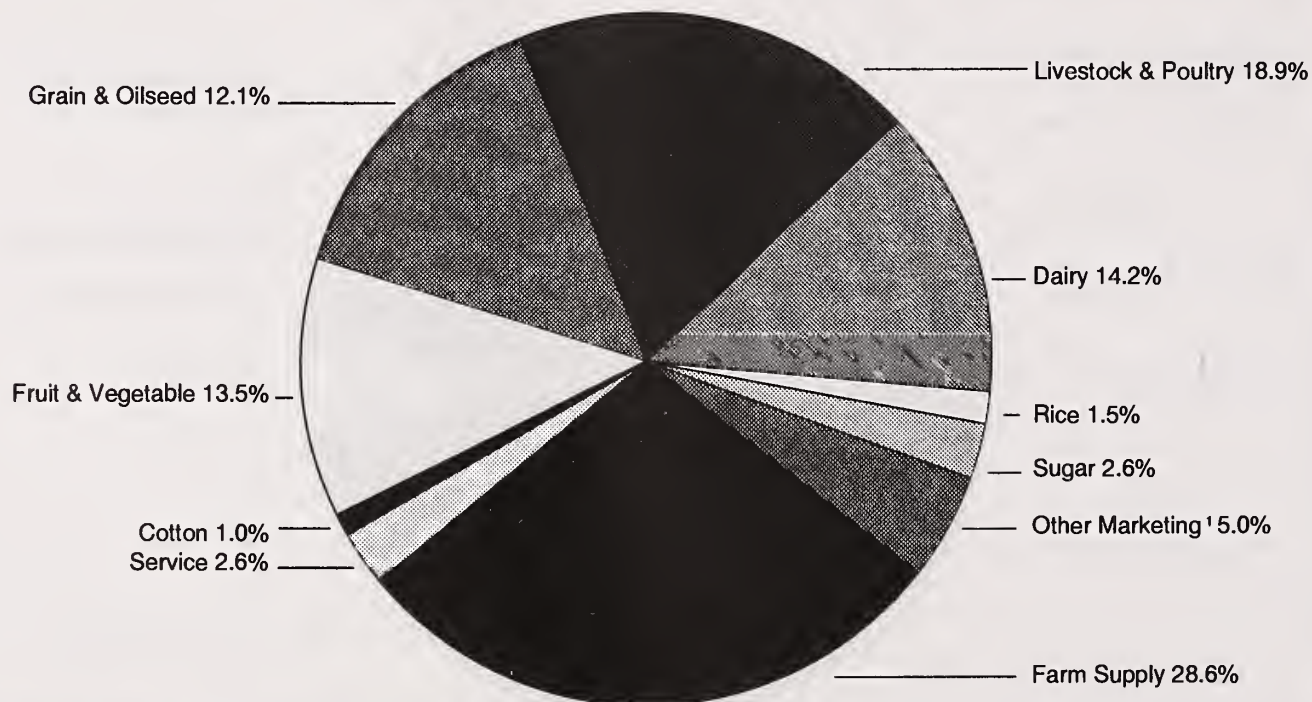
Appendix Figure 7— **Distribution of Total Net Worth, by Type of Cooperative, 1999**



Percentage based on total net worth of \$20.3 billion.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other miscellaneous marketing cooperatives.

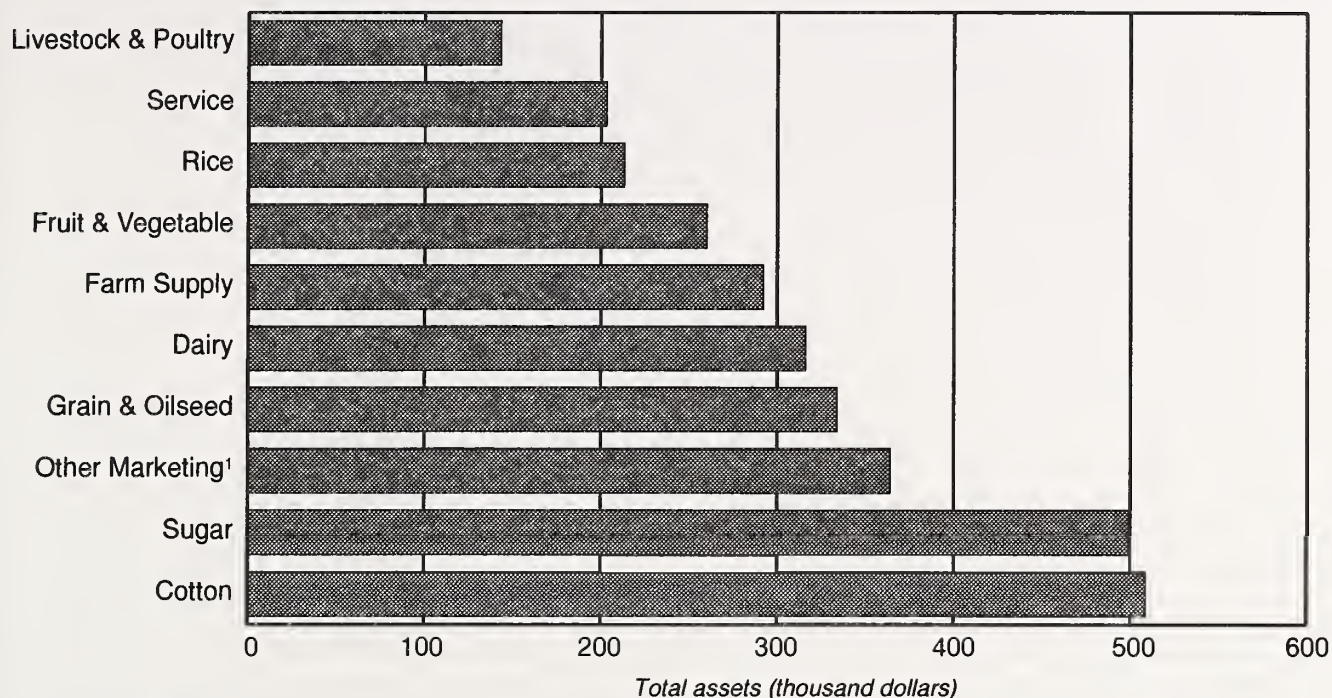
Appendix Figure 8— **Distribution of Total Full-Time Employees, by Type of Cooperative, 1999**



Percentage based on 172,951 full-time employees.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other miscellaneous marketing cooperatives.

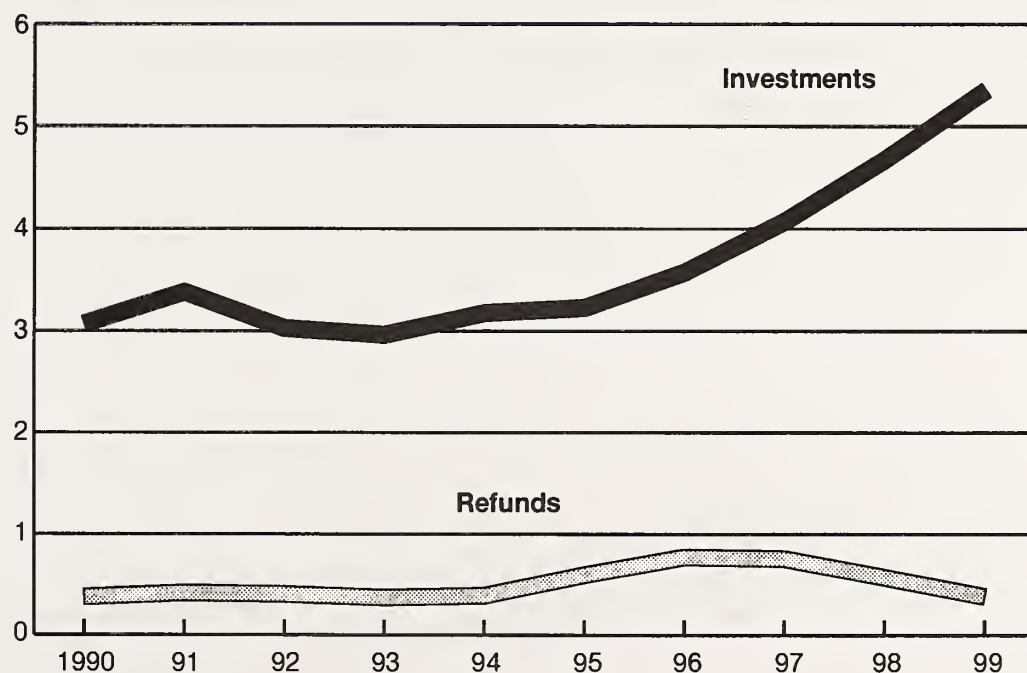
Appendix Figure 9— **Assets Per Full-Time Employee, by Type of Cooperative, 1999**



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

Appendix Figure 10— **Cooperatives' Investments in and Patronage Refunds Received from Other Cooperatives¹**

Million dollars



¹ Includes other farmer cooperatives, CoBank, and Banks for Cooperatives.

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The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues *Rural Cooperatives* magazine.

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